

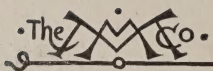
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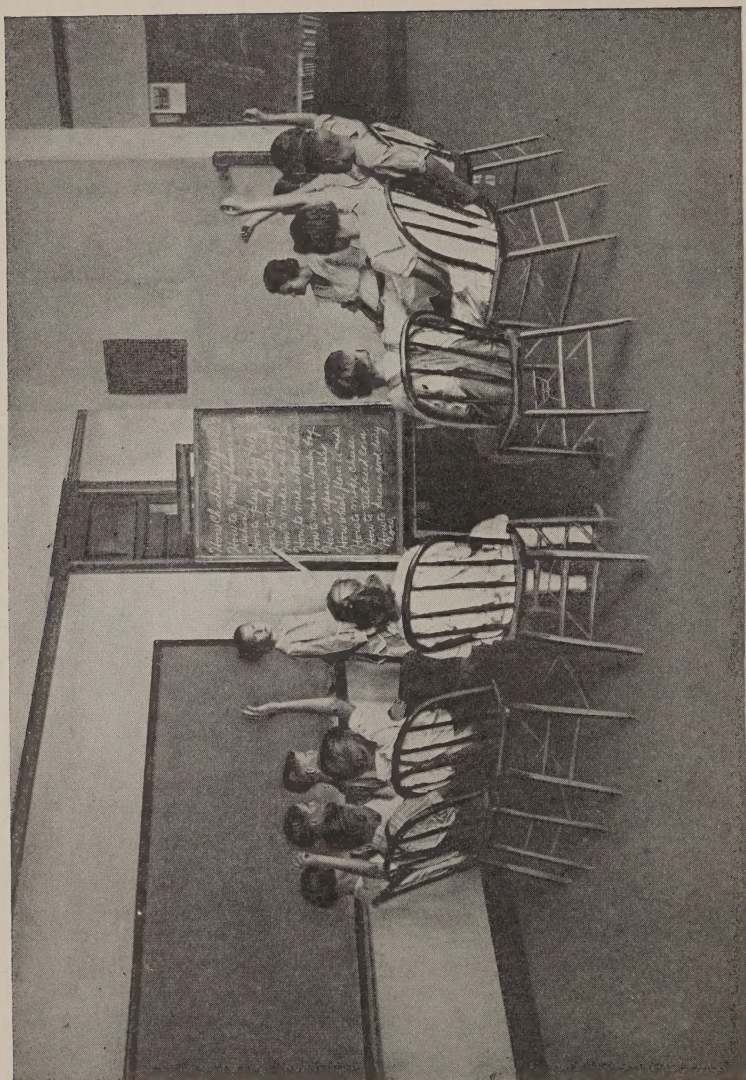
AN EXPERIMENT WITH A PROJECT
CURRICULUM



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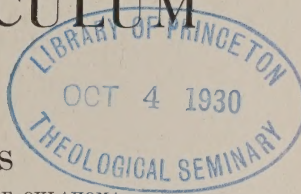
PUPILS OF THE SECOND GROUP SELECTING THEIR OWN PROJECT

AN EXPERIMENT WITH A PROJECT CURRICULUM

BY

ELLSWORTH COLLINGS

PROFESSOR OF EDUCATION, THE UNIVERSITY OF OKLAHOMA



WITH AN INTRODUCTION

BY

WILLIAM H. KILPATRICK

PROFESSOR OF EDUCATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY

New York

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To
Christene and Jewell
Leaders in a Democracy
of Childhood

FOREWORD

THIS report of an experiment in rural school curriculum making embodies an endeavor to interpret and state the basic ideas implied in the concept of *project method* as formulated by Professor William H. Kilpatrick and to use them in the enterprise of rural education. In particular the discussion includes (1) a statement of the principles that controlled the procedure of the experiment; (2) an account of a concrete application of these principles in a typical country school; and (3) an attempt to evaluate these principles in furthering the growth of boys and girls in terms of certain outcomes of the experiment.

Three points should be observed in reading this report. First, the point of view involved is that "life is the great thing after all; *the life of the child at its time and in its measure* no less than the life of the adult." Childhood is not a vestibule through which we pass into adulthood; it is an intrinsic room in the mansion of life. It is a real period of life to be lived for itself. It is not to be regarded as merely a preparation for the adult stage. "What is to be thought, therefore, of that cruel education which sacrifices the present to an uncertain future, that burdens a child with all sorts of restrictions and begins by making him miserable, in order to prepare him for some far-off happiness which he may never enjoy?"¹ As teachers, we are not to seek to abbreviate childhood in such a manner; we are, on the other hand, to endeavor to further the *present growth* of children, for it is the *continuous growing*, life itself, of boys and girls that eventuates in the worthiest type of manhood and womanhood. Second, the essence of the curriculum as used in this experiment is the *purposes* of boys and girls in real life. As such it is necessarily as

¹ Rousseau, J. J., *Emile*, Book I. (Translation.).

broad as life itself and is not limited to any set of prescribed performances to be engaged in by boys and girls in a particular sequence as is the usual interpretation of the school curriculum. In this sense the curriculum is a living thing, *child experiencing*, no more capable of standardization in the sense of performances nicely prescribed in advance and from above than is any other living, growing thing. Third, the findings as here reported are the outcomes of this one single experiment and as such are necessarily tentative. Further experimentation will certainly be necessary to test the full validity of these findings in their wider application in the field of rural education.

The reader to whom this report brings any new insight into the laws of child growth, power in curriculum making, or interest in rich details of concrete child life becomes a sharer in my debt to my teachers and advisers in this study, Fannie W. Dunn, Junius L. Meriam, Frederick G. Bonser, John Dewey, and William H. Kilpatrick. I would be unjust not to mention the reviewers of this report, Edward S. Evenden, Milo B. Hillegas, Mabel Carney, and Rudolph Pintner, whose services have been of incalculable value in rendering it more serviceable for use in further experimentation in rural curriculum making. It is a pleasure, also, to acknowledge indebtedness to the intelligence and sympathy of the children and teachers of this experiment with whom I have had the honor to associate intimately for several years. The friendship and love thus developed are to me "a thing of beauty and a joy forever."

ELLSWORTH COLLINGS.

UNIVERSITY OF OKLAHOMA
August, 1923.

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INTRODUCTION

The reader will find in this book pioneer work along three lines, first in the guiding aims of the school described, second in the means (both content and procedure) used for attaining these aims, and third in the kind of data brought forward to indicate success. The first two of these will be discussed in connection with the actual educative procedure and the theory underlying it. The last will appear in the evaluation of the experiment.

The ordinary school teaches a number of "subjects," such as arithmetic, spelling, or geography. Its hoped-for results may include character or citizenship, but its actual aims are the knowledge and skills included in the typical school subjects. To secure these, it assigns "lessons," typically written down in books. Pupils study these and "recite" upon them. Success is technically indicated by ability to stand certain tests, and these of late years are increasingly "standardized" by a scientific procedure.

Professor Collings has worked along a very different plan. He did not teach "subjects" as these are commonly understood. The actual aims of his school were not the conventional knowledge or skills, but the bettering of the present child life of his pupils. His starting point accordingly was the actual present life of the boys and girls themselves, with all their interests and desires, good and bad. His first step forward was to help guide these children to choose the most interesting and fruitful parts of this life as the content of their school activity. Following this, his aim was twofold, first to help the boys and girls do better than they otherwise would the precise things they had chosen, and second, by means of the experience of choosing and through the experience of more effectual activity gradually to broaden the

outlook of the boys and girls as to what they might further choose and then to help them better effect these new choices.

Professor Collings' philosophy was that this gradual and continuous enlarging of power and outlook, so as, however, to stay always within things that his pupils liked as boys and girls to do then and there, would promise most both for their present and for their future. His faith was that, if the school were run efficiently on this basis, the results would be evident in more wholesome attitudes toward school and toward life in general; and that these attitudes would along with the ideas and skills they were gaining work themselves out, not only at school, but also at home and in the community, and be spread at least in some measure from the children first to the other members of their own families and perhaps later to others in the community. His experiment was to have the school run on this basis and to note the results. To make it more telling as an experiment, a contrast was instituted with other schools, and comparative results were carefully noted.

The underlying theory of the experiment is thus unmistakably at variance with the usual procedure. Before considering the results of the experiment it may be well to examine this theory still more closely. Four interrelated ideas constitute Professor Collings' position. *First*, in order that the school may properly discharge its function *the pupils must purpose what they do*. Parenthetically, to "wish what one does" may be miles different from merely "doing what one wishes." Here the pupils with the teacher decided after due consideration on each next "project," the teacher having final authority to refuse assent if necessary, but in fact seldom if ever using this veto power. The enterprise being so chosen, plans for executing it were similarly discussed and decided. This procedure followed out to the end constituted in the main what is here called the "project method." But the other three constituent ideas are also implied, as will be evident.

The *second* constituent idea is that *actual learning is never single*. In addition to the matter immediately at hand, there are

always in simultaneous operation many concomitant learnings, chiefly perhaps the building of attitudes toward various other life interests involved in what is going on, as for example some degree of self-confidence, some sense of responsibility, a liking for or against the matter at hand, for or against the school as encouraging such, for or against the teacher for his part in it. These attendant learnings inevitably accumulating in character determine here and now the issues of current life. So understood with their immediate bearing they constituted perhaps the chief objective of the school's endeavor.

The *third* constituent idea in the position here presented is, that *all learning encouraged by the school is so encouraged because it is needed here and now in order to carry on better the enterprise now under way*. In the traditional school the activities set up by the school are precisely and intentionally subordinate to acquiring certain prior chosen subject matter. This process is here exactly reversed: the activity is first chosen, and learning and subject matter are henceforth subordinate to it. If, for example, arithmetic or history were needed for the better doing of an enterprise under way, the children learned then and there exactly what was so needed for that specific purpose. The felt pertinence of this to the purpose at hand would by well-known psychologic principles make its learning easier. It is necessary to emphasize here that to Professor Collings this procedure was no "back door" or "left-handed" method for "putting over" the conventional subject matter. In comparison with his real aim of growth in and through better and better living here and now for his boys and girls, he literally did not care whether they got the conventional subject matter of the schools. If they needed it, it would be called for and learned. If it were not called for, it was not needed. If it will later be needed, learn it then. His contrasts of comparative learnings in the matter of formal subject matter as herein presented were in fact undertaken, and are here introduced at the wish of his advisers. The reader who wishes properly to orientate himself as he takes up this book must accept at the

full this statement regarding Professor Collings' attitude, however great a strain it may give one's customary habits of thought.

The *fourth* and final constituent of Professor Collings' position is that *the curriculum is a series of guided experiences so related that what is learned in one serves to elevate and enrich the subsequent stream of experience*. These experiences are guided by the teacher in the light of the three constituent ideas already discussed and of the principle of "activity leading to further activity," namely, that other things being equal, those activities are to be preferred which promise most in their leadings to further like fruitful activities. For the practical execution of such a curriculum theory four lines of activities were simultaneously carried on in the daily work of the experimental school, each of course being broadly interpreted: story telling, construction, play, and excursions. It was felt that if these four typical aspects of life be daily represented in the child's experience and if each single enterprise-experience chosen for execution be made to yield its reasonably rich return, then the future both immediate and remote is better cared for than on any other basis of selection. The emphasis here of course is on what Professor Dewey calls the "continuous reconstruction of experience." The principle of "activity leading to further activity," it may be pointed out, takes adequate care of the moral and social bearing of proposed activities. The curriculum then was continuously made "on the spot" by the joint action of pupils and teacher, present interest and foreseen possibilities, jointly judged, being the deciding factors. The fundamental thesis was that a curriculum so made would best care for all four constituent ideas here considered and so would mean most for the living of the children, — for their present living because it would best call forth their present active powers, for their future living because promising most *for* their present experience it accordingly promises most *from* their present experience.

So much for the theory underlying the experiment. What now of the results? The experimental school made far and away the

best showing. Does this prove then the experimental theory? Does it establish the new position? "Prove" and "establish" are strong words, to be used only with care. If we were able to say that the experimental and the control schools were alike in all respects save the one difference in theory, it would then be in order to accord a corresponding superiority to the experimental theory. But, as Professor Collings points out, we cannot assert that the difference of theory was the only variable involved. Other variables would creep in, some seeming on the face of it to favor one side, others the other. Among those thus favoring the experimental school was a more extended and sympathetic supervision. There was also more extensive equipment and, as is to be expected under such circumstances, probably more zeal on the part of the experimental teachers. Besides, the presence of two teachers possibly more than offset the larger number of children they had to teach (the preparation and quality of all the teachers seeming to be about equal). As favorable to the control schools may be noted the greater familiarity of teacher, pupils, and patrons with the aims and procedures of their schools. The teachers of the experimental school were by contrast not so familiar with their novel procedures: in large measure they had to devise them as they went, and their patrons had to be persuaded to accept them, being at first distinctly hostile. Moreover, the procedure of the control schools had been smoothed out through the practice of many generations in countless many schools and it was especially worked up for these teachers in a well made state syllabus. The experimental school procedure was in contrast almost entirely new, much of it hastily contrived to meet pressing needs out of inadequate material. Mistakes were many. Outside of the three people concerned in the scheme there was little opportunity even for consultation with others. To those who accept the traditional theory and procedure as best the control school would have here a distinct advantage.

What conclusion then do we reach in view of these additional variables? The answer is not easy. A range of positions is

possible according to the relation of all the variables to each other. Do the additional variables, some favoring one side and some the other, cancel each other or leave perhaps a balance of influence favorable to the old? Professor Collings thinks yes. If so, the decision goes to the new. Its superior showing would indicate the superior worth of its theory for use in schools. This is one possible interpretation. If the additional variables, however, do not cancel each other but leave two or more factors of comparable force, any of which might explain the superiority of the experimental school, then we simply do not know from the data of the experiment what produced the superiority. This is another possible position as to interpretation. At one extreme, then, this contest between the old and the new, it would appear, becomes a clear victory for the new; at the other, a stalemate where either side may claim and neither can refute. Anything else to be got from these data will lie between these extremes with a greater or less victory for the new, depending upon how nearly the additional variables cancel or unite so as to leave the difference in theory to be in greater or less degree the dominating factor in the situation.

The cancellation of variables we considered above, but not their *uniting*. Let us now consider this. In the light of other known experience, the more extended supervision is urged by some advocates of the old as a factor likely to go far towards explaining the superiority of the experimental school. They say in effect to the new: Your theory is bad, and, were it not counter-balanced by other factors, would show evil, not good results; it is your supervision that is good, this has — at least in large part — brought these good results. Then reply the new: The supervision given was hand-in-glove with the new theory; it accentuated this theory and gave it more power in its own direction; how then can this theory be given a minus sign and be counted to work evil, while the supervision is given a plus sign and counted to bring good? And this answer seems hard to deny, for the theory and supervision certainly worked in unison together to

the same end. Similar considerations can also be urged, though perhaps in less degree, as regards equipment, the two teachers, and even zeal. In the degree that the variables on either side do thus unite in only one possible direction of influence, in that same degree would the contest seem to be simplified in the direction of a standard control group experiment.

We saw above that a stalemate result at one extreme is the best these data seem to hold for the old, every other interpretation favoring in greater or less degree the new. Now we see even the stalemate threatened with dissolution in favor of the new. Still further the advocates of the new comfort themselves. Suppose the results had been reversed, with the experimental school outcomes as far behind as they are now ahead, does anyone doubt how the results would have been interpreted? The new theory would have been laughed out of court. Believing this to be true, the advocates of the new are, with the situation now in their favor, but human if they cling to their claims.

Leaving the more detailed argument, some other things can be said which will perhaps help us interpret the matter as a whole. First and most obviously, the school as a school was a success, a distinct success. A glance at the record suffices for this. It can now no longer be said that the theory won't work. It has worked. A régime of child purposing is feasible. We can lay aside school subjects as such and succeed, — succeed admirably. Comparisons aside and difficulties yet to be considered, the new curriculum theory with its new aims and its new procedures can be made to go, and go well. This much is clear.

Second, counting the theory as an hypothesis to be tested, the success was just the kind called for by the theory. Consider the new attitudes that were built. Official county records show a marked change of pupil attitude toward school. Enrollment and attendance rose to a point well nigh perfect. Tardiness and punishment dropped to practical zero. There was a great increase in the number to go on to high school. And all the while the neighboring traditional schools maintained their old figures, far

below these and substantially the same as obtained in this school before this régime. But this was not all; for unusual zeal even along traditional lines might conceivably accomplish analogous attendance records. More striking as confirmation of the theory, though the measures are cruder and at times less reliable, are the changed attitudes as regards home and community affairs. More and better periodicals are taken. More and better books are read. Home and farm conveniences are installed. Illness from preventable diseases shows a marked decrease. These indicate, of course, more than attitudes, and again is the theory confirmed in the growth of the habits and skills and knowledges that properly accompany the attitudes. It was in fact life that was being reconstructed, accumulating on the one hand more content and meaning, on the other more disposition and power. It is hard to resist the conclusion that real education was here in progress, far and away above what usually comes from the traditional curriculum. To attain some of these results it is difficult to see how any amount of zeal using the conventional curriculum could avail. It might build favorable attitudes toward school, for these follow principally feelings of success, but the degree of favor here built and the range of application to home and life could hardly come save through activities closer to child and community life than the traditional school subjects. These results strongly corroborate the theory.

Third, while not demanded by the theory, this curriculum procedure actually got in the aggregate more of the conventional subject matter than did the control schools. To appreciate this achievement we must note first that the control schools spent their entire time seeking such subject matter while the experimental school sought it only as it was subordinately needed, and second that the experimental school was here tested by measures devised for the traditional curriculum. Suppose, as regards this second consideration, that the process had been reversed and the control schools had been tested by measures fairly devised for the experimental school. We can well imagine the dismay of

pupils and teachers as they would have faced matters almost utterly foreign to their previous work. It is, of course, highly unfair to the experimental school that we do not also have before us such records. If one were willing, it would be an easy surmise, though of course still surmise, that had this been done, the experimental school would show a superiority of intellectual achievement (knowledge, general information, etc.) quite in keeping with its superior achievement in attitudes. Something of this seems in fact indicated in the superior geography and history results. Surmise aside, however, that the results actually got could be attained with so much less attention paid to attaining them is again a corroboration of the underlying theory on its method side. Again does the theory get exactly what is needed for corroboration.

The fourth result, as an achievement more valuable to those who accept this theory, is the emphatic attention herein called to a new set of school aims, a new procedure for the schoolroom, and new measures for indicating success. True, the trend of American theory and practice has for a hundred years been moving in this same general direction. True, also, that in explicit theory these matters have been before the American public for more than two decades, but so opposed are they to the common way of thinking that many who have read the theory in plain black and white have failed to see what was really meant. This experiment will act then as an object lesson. In this account we see what actually was done in this school and how it was done. Emphatic attention is called to the contrast between the old and the new. Professor Collings' success puts the matter now out in the open where it must be seen. Pointed discussion is bound to take place.

Attention ought in conclusion to be called to what Professor Collings counts as the conditions necessary for success in schools run on this basis. The experiment was conducted in a rural school, though the principles apply equally everywhere. The requirements are more exacting than the conditions usual in rural

schools. They demand more as regards buildings and equipment. They also demand more as regards the ability and preparation and zeal of teachers and supervisors. To do such work as is here portrayed means generally speaking more science and a higher art. Shall we then draw back, and say the cost is too great? Most certainly not. Could we but reckon it, possibly the greatest of all records made by this remarkable school would be its *financial efficiency quotient* of "return in life" per child to dollar expended.

WILLIAM HEARD KILPATRICK.

TEACHERS COLLEGE
COLUMBIA UNIVERSITY
September, 1923.

CHAPTER I

THE EXPERIMENTAL SCHOOL PROJECT

- I. THE PURPOSE, THE METHOD, AND THE OUTCOMES
- II. THE EQUIVALENCE OF SCHOOLS

AN EXPERIMENT WITH A PROJECT CURRICULUM

CHAPTER I. THE EXPERIMENTAL SCHOOL PROJECT

I. THE PURPOSE, THE METHOD, AND THE OUTCOMES

1. The Purpose

THE writer owes what little success he may achieve in the educational world to the common sense of one country school teacher. About the middle of his seventh school year in a country school, he concluded, as many country boys still do, that education was a useless affair and after overcoming the resistance of his parents embarked upon farm work as more satisfying and worth while. The next year the authorities of this school employed, through mere accident, a teacher with much knowledge of the interests of boys and girls. This teacher installed, at his own expense, a small laboratory and workshop in the rear end of the little school and began all sorts of experimentation in agriculture and construction in wood and cloth. He afforded his pupils much genuine opportunity to realize their own purposes—to play games, construct rabbit traps, make doll dresses, go on excursions, and tell stories. On visiting the school one day the writer discovered this new type of school work, and being intensely interested, like most boys, in experimentation and construction he decided to unbox his books and enroll again so that he might do some of the new work. The result of the year's work was that the writer and six of his classmates entered high school the following September, and all seven remained in school for a major part of the course. To-day members of this little class are doing effective work in

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serviceable occupations — one in the ministry, one as a physician, three as teachers, and two as farmers. It is true that they had many good teachers on their way, but the indisputable fact remains that they owe their beginning, if not more, to the courage, common sense, and vision of this one country school teacher, since their class was the first to embark upon higher education from that little country school.

This experience as a student in a country school enriched by several years' observation — in the capacity of a county superintendent of schools — of the strained, tired, and bored expressions of country school children and teachers endeavoring to master the aimless, lifeless, disconnected, congested, and wasteful¹ country school course of study, suggested to the writer the need of a curriculum selected directly from the purposes of country boys and girls in real life. To what extent, with what effect, and under what conditions such a curriculum could be formulated for the country school were, the writer felt, problems that demanded careful investigation since their solution strikes at the very basis of one of the fundamental weaknesses of rural education. It was with such a purpose in mind that this investigation, discussed in the following pages, was begun — a desire to throw some scientific light upon the following questions:

Can the country school curriculum be selected directly from the purposes of boys and girls in real life? If so, to what extent, with what effect, and under what conditions?

2. The Method

The equivalent group method, no doubt, is a familiar one to those acquainted with educational investigations. To those who are not familiar with this method of investigation it is sufficient to say that two groups whose equivalence is determined are compared in their ability to do certain work. In this method,

¹ Meriam, J. L., *Child Life and the Curriculum*, Chapter IV.

the only factor of difference between the two groups is the one factor the effect of which is being investigated. But educational investigations involve such complicated human situations that it is practically impossible to equalize completely all factors. Therefore the nearest approach that can be obtained in many instances is an approximate equivalence. That is the case with this experiment. Section II of this chapter indicates the chief equivalent and variable factors of the experiment.

It was the intent of this experiment that the chief variable should be the curriculum. One group of children, known throughout this report as the Experimental School, used a curriculum selected directly from their purposes in real life. Another group of children, known throughout this report as the Control Schools, used a traditional subject curriculum such as is now used in practically all of the American rural schools.

In this experiment the standings of the children for the year 1917 in the Three R subjects were determined by the use of standardized tests for both the experimental and control groups. Four years later, September, 1921, pairs (one from each group) of children were selected on the basis of their equality in intelligence level, chronological age, number of years' schooling, and number of years spent in the schools of the experiment (see Table III, pp. 229-232). The children thus selected were compared in their achievements in the common facts and skills. In addition, the achievements of the children of the Experimental School were compared with the achievements represented by the National Standards (see pp. 237-245) so as to indicate more fully the quality of achievements attained by the children of the Experimental School. The scales and tests used in 1917 were, except in one case, not the same as were used in 1921, by which time tests of much more adequate nature had been developed. The one exception was the Thorndike Handwriting Scale, which was used for both measurements. It is therefore impossible to subtract the 1917 scores from those of 1921 to show improvement. However, the 1917 scores indicated practical equality of achievement

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between the two groups. Where, therefore, the 1921 scores have shown superiority in the Experimental School's achievement, it seems fair to accept this as an indication of greater improvement in the case of the Experimental School group.

In like manner, certain attitudes of parents and children toward the school and education, phases of their conduct in the home and community, and ordinary community conveniences of the districts were evaluated as far as seemed possible for each of the school years 1917 and 1921, as will later be discussed. Comparisons of these measurements are made in the following pages. They seem, in every case, to show superiority for the Experimental School group.

3. The Outcomes

The outcomes at the end of the four-year period of the Experimental School hereafter described,¹ when compared with those of the Control Schools and with the National Standards, were as follows:

1. The mean achievement of the Experimental School in the common facts and skills when expressed in terms of the achievement of the Control Schools was 138.1%.
2. The mean achievement of the Experimental School in the common facts and skills when expressed in terms of the achievement represented by the National Standards was 110.8%.
3. The improvement of the children of the Experimental School in eight ordinary attitudes toward the school and education ranged from 25.5% to 93.1%, whereas the improvement of the children of the Control Schools in the same attitudes ranged from 2% to 15%.
4. The improvement of the children of the Experimental School in twelve ordinary phases of conduct in life outside of the school ranged from 35% to 100%, whereas the improvement of the children of the Control Schools in the same phases of conduct ranged from no improvement to 25%.

¹ A detailed, statistical treatment of the outcomes with procedure is given in Chapter IV of this report.

5. The improvement of the parents of the Experimental School in nine ordinary attitudes toward the school and education ranged from 16% to 91.6%, whereas the improvement of the parents of the Control Schools in the same attitudes ranged from no improvement to 30%.
6. The improvement of the parents of the Experimental School in fourteen ordinary phases of conduct in the home and community ranged from 20% to 96%, whereas the improvement of the parents of the Control Schools in the same phases of conduct ranged from no improvement to 25%.
7. The improvement in ten ordinary community conveniences of the Experimental School ranged from 34.5% to 94%, whereas the improvement in the same conveniences for the Control Schools ranged from 3.3% to 24.8%.

II. THE EQUIVALENCE OF SCHOOLS

I. Location of Schools

Three rural schools located in McDonald County, Missouri, were selected for this experiment. One school, known as the Experimental School, had an enrollment of forty-one children ranging from six years old to fifteen and was located out in the open country more than six miles from the nearest town. The other two schools, known as the Control Schools, had a total enrollment of sixty children — twenty-nine in one and thirty-one in the other — ranging from six years old to sixteen and adjoined the Experimental School. The schools, at the beginning of the experiment, were typical rural schools and were very much alike in every respect.

2. Factors Determining Selection of Schools

With a view to making a trustworthy comparison of the effects of different curriculums, schools were selected for the experiment on the basis of their similarity (1) in abilities of children and their school achievements, attitudes toward the school and education, and conduct in life outside of the school; (2) in nationality of parents and their wealth, education, attitudes toward the school

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and education, and conduct in the home and community; (3) in community conveniences and social and economic status of the districts; (4) in length of school term, course of study, library, school equipment, and supervision; (5) in number of teachers and their age, tenure, teaching experience, salary, and education. The complete fulfillment of these conditions is, of course, impossible in such a complicated human situation as an experiment of this kind involves. It seems fairly probable that the nearest approach to an approximation of these factors is to be found in adjoining rural schools in the open country, since rural conditions tend to influence these factors about as much in one district as in another.

In order to point out as accurately as possible the extent to which this experiment approximated this requirement for a control study of the effects of different school curriculums, the following discussion of the equivalence of the two groups is divided into two parts: (1) *Approximately Equivalent Factors*, and (2) *Variable Factors*. The former attempts to single out those factors that were practically identical in the two situations; the latter those variable factors that were either inherent in the situation or necessarily introduced in the effort to carry forward the experiment.

Approximately Equivalent Factors

1. **Intelligence level of children, chronological age, number of years' schooling, and number of years spent in the schools of the experiment.** In order to match each pupil of the Experimental School with another pupil from an adjoining school in terms of the above factors it was found necessary to select children from both of the Control Schools, since the same variation in those factors could not be found in any one of these schools. The children selected for comparison were approximately the same in intelligence level, chronological age, number of years' schooling, and number of years spent in the schools of the experiment. A list of the children selected on the basis of these factors is given in Table III, Chapter IV, as well as a list of the children that were rejected because of a variation from one or all of these factors.

2. **School achievements, attitudes toward the school and education, and conduct of children in life outside of the school.** At the beginning of the experiment the standings of the children in both the Experimental and Control Schools were approximately the same in reading, handwriting, spelling, and arithmetic, as indicated below in Table I. Their attitudes toward the school and education were approximately the same, if school enrollment, attendance, punctuality, disciplinary cases, persistence in school throughout the year, per cent of enrollment graduated, and per cent of enrollment entering high school can be taken as indications. This is shown in Table XXIV, Chapter IV. An attempt was also made to investigate the comparative status of both groups in conduct in life outside of the school. The data here are of course much less reliable, since no definite records or objective measures were available at the beginning of the experiment. The conditions as far as they could be ascertained at that time are shown in Table XXVI, Chapter IV. These, too, indicate approximate equality, the experimental group being on the whole somewhat inferior to the control group.

TABLE I

COMPARISON OF MEDIAN SCORES IN READING, HANDWRITING, SPELLING, ADDITION, SUBTRACTION, MULTIPLICATION, AND DIVISION FOR ALL GRADES OF THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE BEGINNING OF THE SCHOOL YEAR, 1917

READING
(Thorndike Scale Alpha)

GRADES	III	IV	V	VI	VII	VIII
Experimental School . .	2.28	3.48	5.96	5.98	6.11	6.78
Control Schools . . .	2.78	3.12	6.11	5.14	6.17	8.98

HANDWRITING
(Thorndike — Quality)

GRADES	III	IV	V	VI	VII	VIII
Experimental School . .	4.0	5.0	6.0	6.0	8.0	9.0
Control Schools . . .	4.0	6.0	5.0	7.0	8.0	11.0

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SPELLING

(Ayres)

GRADES	III	IV	V	VI	VII	VIII
Experimental School . .	23.0	43.0	59.0	42.0	43.0	62.0
Control Schools . . .	27.0	44.0	58.0	43.0	42.0	61.0

ADDITION

(Courtis — Speed — Accuracy 100)

GRADES	III	IV	V	VI	VII	VIII
Experimental School . .	1.0	2.0	4.0	5.0	5.0	6.0
Control Schools . . .	1.0	3.0	5.0	5.0	6.0	6.0

SUBTRACTION

(Courtis — Speed — Accuracy 100)

GRADES	III	IV	V	VI	VII	VIII
Experimental School . .	2.0	4.0	5.0	6.0	6.0	7.0
Control Schools . . .	1.0	5.0	5.0	6.0	7.0	8.0

MULTIPLICATION

(Courtis — Speed — Accuracy 100)

GRADES	III	IV	V	VI	VII	VIII
Experimental School . .	3.0	3.0	4.0	6.0	6.0	7.0
Control Schools . . .	3.0	4.0	5.0	6.0	5.0	7.0

DIVISION

(Courtis — Speed — Accuracy 100)

GRADES	III	IV	V	VI	VII	VIII
Experimental School . .	1.0	2.0	2.0	5.0	5.0	7.0
Control Schools . . .	1.0	3.0	3.0	5.0	6.0	7.0

3. Community convenience, social and economic status of the districts. The amount of taxable property supporting each child was practically identical in both instances. The Experimental School had an assessed school valuation of \$1969 for each child while the Control Schools had a valuation of \$1982 for each child. The Experimental School district had an area of seven square miles, while the Control Schools had a total area of eleven and one-half square miles — six square miles for one and five and one-half for the other. The social life of the people consisted chiefly of an occasional party held at the homes of the community and of irregular religious services conducted at the school buildings or near-by churches. In no district was there to be found a community organization of any kind. Community meetings, community fairs, community play days, and community recreations were unknown to the people of these communities. Table XXVIII, Chapter IV, indicates that the common ordinary community conveniences found in the homes of these schools were practically the same at the beginning of the experiment.

4. Parentage of children—nationality, wealth, education, attitudes toward the school and education, and conduct in the home and community. The parents of both the Experimental and Control Schools were largely of English extraction and were natives of the communities. The schools seemed to differ very little in this particular. In each district the people were financially comfortable. Ninety-six per cent of the patrons of the Experimental School owned their homes, while ninety-eight per cent owned their homes in the Control Schools. The others were renters, comfortably situated. The ideal of the people of these communities is to own a small farm ranging from forty to eighty acres. General farming with a tendency toward dairying and small fruits was the chief occupation of the people. The educational equipment of the parents was quite limited. The average academic equipment for the adults in both instances was probably the fifth grade standard. Tables XXV and XXVII, Chapter IV, indicate that the measured attitudes of the parents toward the

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school and education, and phases of conduct in the home and community were practically the same at the beginning of the school year 1917.

5. Length of school term, course of study, library, school equipment, and supervision at the beginning of the experiment. In these particulars the schools were identical. Both the Experimental and Control Schools maintained eight months' terms during the entire time that this experiment was in operation and had done so for three years prior to it. The course of study used in all of the schools preceding this experiment was the traditional subject course of study prescribed by the State Department of Education (Missouri). The library, school desks, apparatus, and other fixtures were practically alike, since these were selected with reference to the recommendations and requirements of the course of study. The supervision in each instance had consisted for the most part prior to the experiment in the traditional visits of the county superintendent of schools, which were chiefly of an inspectional nature.

6. Teachers — number at beginning of experiment, age, tenure, amount of teaching experience, and education. The number of teachers employed at the beginning of the experiment was one for each school. This number changed during the operation of the experiment, as will be pointed out later on, under the discussion of variable factors. In both instances, the teachers averaged about twenty-two years of age. There was one change of teachers in both instances during the time that the experiment was in operation. The effects of this change were probably about the same in each instance, since it occurred at the end of the second year. The average experience of the Experimental School teachers was three and one-half years, while that of the Control Schools was three years. The amount of educational training of the teachers was practically identical. All had had four years of high school work and had, in addition, two years of normal or university training. The Experimental School teachers received a major part of their professional training at the state university while

the Control School teachers received all of their professional training in the state normal schools.

Variable Factors

1. The Curriculum. The curriculum used in the Control Schools was the traditional subject curriculum. It was published in book form consisting of two hundred twenty pages outlining very definitely and specifically the amount of work that the teacher was to do each quarter of the school term. It consisted of a large body of suggestions and devices for teaching the usual school subjects. In addition, it contained lists of supplementary books, bulletins, and agricultural, cooking, and manual training equipment that should be used in connection with these subjects. The course of study was probably one of the best of its kind to be found anywhere for the one-room country school. Summarized portions of this course of study are given in Chapter II of this discussion. The Experimental School curriculum was quite different. It was selected directly from the purposes of boys and girls and was under continuous construction as the experiment progressed through the coöperative efforts of the supervisor, teachers, and pupils of this school. No use was made of the existing courses of study, since this was an experiment in constructing a curriculum in terms of the purposes of boys and girls. An examination of this curriculum, given in Chapter III will reveal the fact that it involved a great deal of research work, since no curriculum of this kind was in existence for the one-room country school.

2. School library and equipment. The library of the Control Schools consisted of all the books and bulletins required by the State Course of Study. These books and bulletins were selected on the basis of supplementing the regular textbooks used in these schools. The Control Schools used the regular adopted county textbooks, which in every instance would have been counted among the best of modern school textbooks available at that time. The Experimental School Library contained a great variety of

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story, excursion, play, and construction books and bulletins selected with reference to the purposes of boys and girls. No textbooks, as such, were used in the Experimental School, though there were some textbooks in the library used as reference materials. The Control Schools were well equipped with the apparatus needed to teach effectively the usual school subjects, such as, for instance, charts, maps, globes, sand tables, agricultural equipment, etc., prescribed by the course of study. The apparatus of the Experimental School consisted of equipment for play, story, excursion, and construction selected with reference to the purposes of boys and girls. The library and apparatus of the Experimental School, to be sure, were more expensive than the library and apparatus required by the course of study of the Control Schools.

Both the Experimental and Control Schools were equipped with such modern conveniences as drinking fountain, heating and ventilating system, library cases, teacher's desk, etc. As a matter of fact, both the Experimental and Control Schools were approved by the State Department of Education (Missouri) as Standard Rural Schools, which is evidence of the fact that all the schools were equipped to do effective work, the only difference being in the kind of apparatus, books, etc., used as a result of the differing curriculums.

3. Number of children. The Experimental School had an enrollment of forty-one children ranging from six to fifteen years old. One Control School had an enrollment of twenty-nine children ranging from six to fourteen years old, and the other had an enrollment of thirty-one children ranging from six to sixteen years old. In one instance the Experimental School exceeded the enrollment of the Control Schools by twelve children; in the other instance by ten children.

4. Number of teachers. At the beginning of the experiment, each school employed one teacher. The Experimental School found it necessary, about the middle of the first year, however, to employ an assistant teacher since it was impossible for one teacher

to handle forty-one children and do the extra work incident to such an experiment. Her educational preparation, age, tenure, and teaching experience were the same as that of the regular teachers of these schools. The teaching staff of the Experimental School thus consisted of one regular teacher and one assistant, while that of each of the Control Schools consisted of one regular teacher.

5. Community meetings. A reference to Chapter III will reveal the fact that the community meetings of the Experimental School held in the evenings were an integral part of the procedure of that school. The programs of these meetings consisted, in every instance, of reports of and participation in projects as planned and worked out in the school by the children. The purpose was to afford one group of children an opportunity to report their findings to and participate conjointly with the other groups of the school. They were called "community meetings" in the sense that all of the children, as well as the parents, of the community were afforded an opportunity to share in the results of the project of and participate conjointly with any one child or group of children. This use of the term "community meeting" is quite contrary, to be sure, to the usual interpretation of what a community meeting is. A community meeting, as generally understood, is a meeting usually held at irregular intervals and very commonly consisting of a lecture by some one other than the children of the school, such as, for instance, a lecturer from the College of Agriculture or some prominent man or woman of the community. The usual purpose of such a meeting is to stimulate, stir up, or prod the patrons of the district to some line of action.

There are thus at least two fundamental differences between these two types of community meetings. In the first place, one represents *active sharing*, primarily, on the part of the children, and, secondarily, on the part of the parents in so far as they are able to enter into child projects; the other one represents relatively *passive reception* of some imported idea, primarily, on the part of the parents, and secondarily, on the part of the children

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in so far as they are able to absorb the content of the program. In the second place, the one represents an integral part of the school procedure; the other, at the most, an appendage.

Since the children's community meetings were an integral part of the Experimental School procedure, and since the adult type of community meetings was held in the Control Schools, the variable factors in this situation were (1) the lengthening of one school day each week and consequently of the school year, and (2) a greater amount of participation on the part of parents and consequently a greater amount of community interest. The community meetings of the Experimental School were usually held on each Wednesday evening at seven and continued for two hours. For the entire school year this would amount to sixty-four hours added to the regular school term. In case of the Control Schools, the meetings were held irregularly and averaged around six meetings each school year. Such meetings usually began at seven in the evening and extended over a period of two hours. This would amount to twelve hours for the entire school year for each of the Control Schools devoted to night community meetings of the adult type.

Unquestionably, the community meetings of the Experimental School were the cause of a greater amount of participation on the part of parents and consequently a greater amount of community interest than were the meetings of the Control Schools, because such meetings (1) occurred at shorter intervals and were held regularly; (2) inherently invited *active*, rather than *passive*, participation; and (3) were vital in the sense that they represented an embryonic community life, active with the type of projects that reflect real life in the home and community. The community meeting factor was, undoubtedly, a variable that influenced the outcomes of the experiment, but it should be observed that these meetings were an integral part of the Experimental School procedure.

6. Attitude of parents. At the beginning of the experiment, the parents of the Experimental School were much opposed to the

type of work carried on in this school. Most of them were grounded in the notion that the function of the school is to teach the traditional school subjects. Since these subjects, as such, found no place in this school, they quite naturally charged that the children were not getting the necessary arithmetic, reading, and writing. This opposition is perhaps typically illustrated by a declaration of one of the prominent farmers of the district at one of the children's community meetings. After hearing their report on "The Community Diseases," he immediately arose and declared that the children were revealing things that would ruin the district forever. He ironically stated at the conclusion of his speech that the children should be studying arithmetic instead of playing Roly Poly. This last statement of the farmer perhaps sums up well the two conflicting points of view at the beginning of the experiment. This conflict constituted one of the most serious factors that the experiment had to overcome, since it involved a change of a deep-seated attitude toward the nature of school work.

Since the work of the Control Schools harmonized with the attitude of the parents toward the function of the school, no change in point of view was required in order to carry forward the type of work that these schools were doing. The fact that these schools represent the best type of traditional rural schools in that county is evidence that the parents supported the type of work that they were attempting to do.

7. Amount of supervision. The writer was county superintendent and as such was supervisor of both the Experimental and Control Schools, devoting to actual supervision approximately an average of twenty-four hours each month in the schoolroom of the Experimental School, and approximately six hours each month similarly to each of the Control Schools. In addition to the actual classroom supervision of the Experimental School, the writer did a great deal of outside work in the way of selecting and gathering materials, working out suggestive plans for the teachers to use in helping the children work out their projects, etc.

8. Teaching experience. All teachers had practically the same amount of teaching experience as has been previously pointed out. The variable factor in this instance is the kind of teaching experience demanded by the two types of schools. The experience and professional training of the Experimental School teachers had been in and for the traditional rural school. On the other hand, the experience and professional training of the teachers of the Control Schools had been in and for the type of work that they were doing in these schools.

9. Salaries of teachers. The salaries of the teachers averaged \$75 per month — \$85 for the regular and \$65 for the assistant — for the Experimental School and \$85 each for the Control Schools. This advantage of the Control Schools in salary is due to the fact that the assistant teacher of the Experimental School was paid less salary owing to the inability of that district to pay the regular salary prescribed for her training. It was an easy matter to retain teachers for this position at the reduced salary since they were eager for the educational training and opportunity afforded by the Experimental School. As a matter of fact, only one change occurred, during the entire time the experiment was in operation.

10. Teaching load. The Control Schools teachers each had around thirty children classified according to the graded plan. A reference to the Daily Program of Studies for these schools, given in Chapter II, reveals the fact that each of these teachers had eight grades. The number of daily recitations was twenty-five. The time for each recitation ranged from five to twenty-five minutes, and averaged fourteen minutes for each class. Each teacher was provided with a printed course of study outlining very precisely the amount of work that was to be done each quarter of the school term. It consisted of a large body of suggestions and devices for teaching the traditional school subjects. In addition it contained lists of supplementary books, bulletins, and agricultural, cooking, and manual training equipment that should be used in connection with the teaching of the various subjects of the course of study.

The Experimental School teachers had forty-one children classified into three groups on the basis of the mental, social, and interest factors. A reference to Chapter III indicates that these teachers assisted the children in working out four types of projects — Excursion, Hand, Story, and Play. The daily schedule of studies was very flexible, allowing the whole school to engage in one project at one time, or an individual pupil, or a group of pupils, or a combination of the groups. An examination of the Experimental School curriculum, given in Chapter III of this report, will reveal the fact that it entailed a great deal of work on the part of the teachers in selecting, gathering, and arranging materials, books, bulletins, apparatus, etc., essential in working out the projects of the children since no curriculum of this kind was in existence for the one-room country school.

The Experimental School was used as a demonstration school for all the schools of the county. As such, the one hundred twenty teachers of the county spent at least two days each year observing the work with a view of getting some ideas for improving their own work. In addition to the visiting teachers of the county, many other teachers and educators from that section of the country visited the school during its operation, for various purposes. Accommodating these professional visitors in such ways as answering questions regarding various phases of the work, supplying them with project materials, and class observation added greatly to the regular work of the teachers and was one of the primary reasons for adding the assistant teacher to the teaching staff of this school.

11. Supervisory load. The supervision in the case of the Experimental School was devoted largely to helping the teachers of this school acquire the point of view represented by the project idea and in readjusting the pupils, equipment, materials, etc., to this new type of school work. This readjustment was for the most part accomplished by the writer through (1) discussing with the teachers once each week such educational books as contributed assistance in carrying forward the project work; (2) working out,

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occasionally, projects with the pupils (teachers observing); (3) assisting in securing the apparatus, equipment, and materials needed in working out the projects of the children; (4) preparing suggestive plans to guide the teachers in helping the children work

TABLE II
SUPERVISORY LOAD IN EACH SCHOOL

EXPERIMENTAL SCHOOL	CONTROL SCHOOLS
I. <i>Teachers:</i> Inexperienced and untrained in project teaching.	I. <i>Teachers:</i> Experienced and trained in traditional type of teaching.
II. <i>Curriculum:</i> In process of making through coöperative efforts of supervisor, teachers, and pupils.	II. <i>Curriculum:</i> Printed course of study supplied to the teachers from above, outlining in detail the amount of work to be accomplished each quarter of the school year.
III. <i>Classroom Procedure:</i> Procedure for selecting and working out projects of boys and girls in process of making.	III. <i>Classroom Procedure:</i> Procedure for teaching each of the traditional school subjects outlined minutely in a printed course of study.
IV. <i>Materials and Apparatus:</i> Books, papers, magazines, play, experimentation, construction, and occupational materials and apparatus selected as needed with reference to the purposes of boys and girls.	IV. <i>Materials and Apparatus:</i> Textbooks, supplementary books, bulletins, pictures, charts, maps, agricultural and cooking materials and apparatus listed in the printed course of study for the teaching of each of the traditional school subjects.

out their projects; and (5) assisting in keeping a written record of the projects as worked out by the pupils of the school. In case of the Control Schools, the supervision consisted for the

most part in helping the teachers (1) to improve their methods in teaching the traditional school subjects; (2) to grade and classify the pupils; (3) to secure the needed equipment, apparatus, and materials in carrying on the work effectively; and (4) to discuss solutions for problems connected with their schoolroom work. Since the teachers of these schools were well trained and experienced in the type of work that they were doing and since their work was definitely and specifically planned beforehand in the form of a printed course of study, much less supervision was required to carry forward the work effectively with them than was necessary for the work of the Experimental School. In one case it was an execution of a well-defined and printed course of study, schoolroom procedure, materials, apparatus, and equipment handed down from above to the teachers; in the other it was a coöperative process of constructing a new type of curriculum, schoolroom procedure, materials, apparatus, and equipment. The difference in contrasted procedures will perhaps be made clearer by noting the differences shown in table on preceding page.

CHAPTER II

THE CONTROL SCHOOL CURRICULUM

- I. THE DAILY PROGRAM OF STUDIES
- II. THE CURRICULUM SUBJECTS

CHAPTER II. THE CONTROL SCHOOL CURRICULUM

I. THE DAILY PROGRAM OF STUDIES

THE following daily program of studies was used in the Control Schools throughout the operation of the experiment:

THE DAILY PROGRAM

BEGIN	TIME (minutes)	RECITATION PROGRAM
8:50	10	Opening Exercises, Music, All
9:00	20	A Arithmetic
9:20	10	D Reading, 1st year
9:30	10	D Reading, 2d year
9:40	15	C Reading
9:55	15	B Reading
10:10	20	A Grammar
10:30	10	Recess
10:40	10	D Reading, 1st year
10:50	10	D Reading and Spelling, 2d year
11:00	12	C Arithmetic, 3d year
11:12	13	C Arithmetic, 4th year
11:25	20	A History and Government
11:45	15	B Arithmetic
12:00	60	Noon
1:00	5	Music, All
1:05	12	Nature Study, 3d year
1:17	13	D Nature Study and Numbers
1:30	25	A and B Agriculture
1:55	20	Writing and Drawing, All
2:15	10	Recess
2:25	15	C Reading, Language, and Spelling
2:40	15	A Geography
2:55	15	B History
3:10	10	D History, 1st year
3:20	10	D History, 2d year
3:30	20	A Reading and Spelling
3:50	10	B Language and Spelling
4:00		Dismiss

A study of this program of studies reveals several interesting facts. In the first place, it is easy to discern the traditional curriculum principles back of its organization. The aim is apparently a mastery of the subject matter of all the common school subjects. The daily schedule of studies seeks to apportion the time among these subjects in such fashion as will best realize this aim by the time that the children have completed the elementary school grades. In the second place, it provides for a graded school, patterned after the city school organization. There are eight grades, and in many instances a sub-first grade, or chart class, corresponding to the kindergarten of the city school. The number of daily recitations is twenty-five. The time for each recitation ranges from five to twenty-five minutes, and averages fourteen minutes for each class. The four upper grades have considerably longer recitation periods than the lower grades, the averages being eighteen minutes for the former and ten minutes for the latter.

II. THE CURRICULUM SUBJECTS

Typical portions of the course of study used in the Control Schools are given here for the purpose of indicating the kind of work engaged in by the pupils of these schools. For a complete outline of work studied by these children during the operation of the experiment, see *State Course of Study for the Elementary Schools in the State of Missouri* for the year 1919.

I. Reading

Class D — First Year

I. First Quarter.

1. *Material.* Stories containing numbers, nursery rhymes, topics chosen from literature, nature study, history, and home experiences should be at hand. A good blackboard and devices to aid in teaching beginners to read are essential.

2. *Method and Devices.* Children need no books for beginning work. Use the blackboard, chart, or words and sentences written or printed on cardboard. Either script or print may be used. Words, sentences, and stories found in the readers which will be studied first should be used as a general rule. Tell stories to children and have them tell them to you and the class. Have children read sentences as a whole and not word by word. Every reading lesson should also be a language lesson.

3. *Phonics.* Very little, if anything, in phonics should be taught the first quarter. Children may be taught to recognize some initial and final consonants and a few of the simplest vowel sounds. Phonics should be studied from words already learned.

2. Second Quarter.

1. *Material.* Beside the primer in daily use there should be two or three other primers or simple first readers. The use of the blackboard may be continued this quarter.

2. *Method and Devices.* Let all of the work be done under the spur of interest and with heartiness and good will. Regular work should be given in the primers. Use conversation lessons based on stories. Give the first third of one book and then change to the second book to be used in this grade and take up the first part of it.

3. *Phonics.* Continue the work begun in the first quarter.

3. Third Quarter.

1. *Material.* Complete the primers begun in second quarter and begin the first reader. Make use of such material as a portion of *Sunbonnet Babies Primer*.

2. *Method and Devices.* Continue the use of board. Use pictures and objects freely. Center your effort on securing thoughtful silent reading and remember that rapid readers are usually the best readers. Review hard words. Drill on all new words.

3. *Phonics.* Continue phonics begun in other quarters.

4. Fourth Quarter.

1. *Material.* Complete two or more first readers. Teachers and children may read such books as *Overall Boys* and *Sunbonnet Babies*.

2. *Method and Devices.* Use dramatization of stories as much as possible during this quarter. Give much attention to silent reading. Review first readers, making sure that pupils have mastered all the words.

3. *Phonics.* Continue the work of third quarter. Review elementary sounds. Give quick, lively drills.

Class C — Third Year

1. First Quarter.

1. *Material.* Pupils should complete the first fourth of at least two third readers. Pupils should read *The Tree Dwellers* or *Around the World*, Book II.

2. *Method and Devices.* Silent and oral reading will both be continued, but much more time will now be devoted to silent reading. Before beginning the oral reading lesson, the class should be questioned upon the story. Endeavor to attain two specific objects in the reading class. One is mechanical which includes correct pronunciation, etc.; the other includes the grasping of the thought.

3. *Phonics.* Continue drill on phonics. Pupils should master fairly well this year all of the elementary sounds. Drill on words commonly mispronounced.

2. Second Quarter.

1. *Material.* Pupils should read the second fourth of two third readers. Have pupils read Miss Cowele's *Crusoe Reader*.

2. *Method and Devices.* Follow the plan outlined for first quarter's work.

3. *Phonics.* Continue the work as outlined for first quarter.

3. Third Quarter.

1. *Material.* Pupils should read the third fourth of two third readers. Have pupils read Scudder's *Book of Legends*.

2. *Method and Devices.* The meaning of new words and phrases should be learned. Pupils should be taught the use of the dictionary. Require sight reading of easy material.

3. *Word Study.* Teach the meaning and use of simple prefixes and suffixes. Strive to increase the child's vocabulary.

4. Fourth Quarter.

1. *Material.* Have pupils read the last fourth of two third readers. Pupils should read the *Heart of Oak*, Book II.

2. *Method and Devices.* Continue method and devices outlined above. Review work of year which may need it.

3. *Phonics.* Continue the drill on phonics. Pupils should have mastered well by now the elementary sounds.

Class B — Fifth Year

1. First Quarter.

1. *Material.* Two fourth readers should be provided for the work. Pupils should read *Greek Gods*, or *Story of Robin Hood*.

2. *Method and Devices.* Keep in mind that some of the objects of teaching reading in this year are to provide opportunity for use of imagination; to give the pupil power to master the printed page and to understand the language of the book. The positions of pupils when reading should be erect, easy, graceful. Pupils should read distinctly, loud enough to be heard and with expression. The teacher may read to the class classic selections. Teach the figures of speech. Make definite assignments for the class.

3. *Dramatization.* Continue to dramatize suitable selections. The teacher must be keenly interested in this work and must handle it well or it will be valueless.

4. *Home Reading.* Pupils from the fifth year on should do more or less home reading.

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2. Second Quarter.

1. *Material.* Read one-fourth of a fourth reader. Read *Story of Lincoln* and *Black Beauty*.

3. Third Quarter.

1. *Material.* Pupils should read another quarter of a fourth reader. Read *Robinson Crusoe* and Ruskin's *King of the Golden River*.

4. Fourth Quarter.

1. *Material.* Read one-fourth of a fourth reader. Read *Little Princess*.

Class A — Eighth Year

1. First Quarter.

1. *Material.* Take choice selections from the fifth reader. For class study use *Vision of Sir Launfal* and *Rip Van Winkle*. For outside reading use *The Boys' Parkman*.

2. *Method and Devices.* Give especial attention to silent reading and thought mastery. Review any part of class A work not thoroughly mastered. Teacher and pupils should make thorough preparation of lessons.

2. Second Quarter.

1. *Material.* Take choice selections from fifth reader. Use Dickens' *Christmas Carol* in class. Read outside class *Treasure Island*.

3. Third Quarter.

1. *Material.* Select choice pieces from fifth reader. Read in class *Legend of Sleepy Hollow* and *Enoch Arden*. For outside reading use *Tales from Shakespeare*.

4. Fourth Quarter.

1. *Material.* Select choice pieces from fifth reader. For class reading use Hawthorne's *The Great Stone Face*, and *Lives of Eminent Missourians*.

2. Arithmetic

Class D — First Year

1. First Quarter. Count objects in the room, the boys in the class, the girls in the class, etc. At first allow pupils to touch the objects as they count them and keep the number below ten. Count the boys by two's in the class, likewise the girls. Teach pupils to recognize cubes, prisms, cylinders, and spheres.

2. Second Quarter. Continue counting work. Have pupils count to one hundred. Have pupils draw triangles, squares, and rectangles and also build with small squares, larger squares, and rectangles. The work of the first two quarters should be entirely oral.

3. Third Quarter. By actual measurements solve such problems as: How tall are you? How wide is the window? How long is the desk? Pupils should learn to write Arabic numerals to twenty. Let the pupils solve many concrete problems and abstract examples with small numbers. Have a supply of pennies, nickels, and dimes. You can teach combinations of five's and ten's and many other problems with these.

4. Fourth Quarter. Continue work suggested in other quarters. Do not neglect abstract drill. Let pupils learn to read and write numbers in Arabic notation to one hundred. Teach combinations through the six's. See that work is done rapidly. Drill work is interesting if you put spirit into the recitation. The fractions one-half, one-third, and one-fourth should be taught. Do much paper folding to develop the ideas of simple fractions. Find halves, thirds, and fourths of objects as apples, etc. Count by ten's to one hundred.

Class C — Third Year

1. First Quarter. Read and write numbers to 10,000. Teach "carrying" in addition. Give many problems where the numbers are less than 10,000 and less than six addenda. Teach pupils to check addition by adding in reverse order. Teach United States

money, including the dollar. Add sums of money. Review multiplication already learned and teach the six's.

2. Second Quarter. Continue the work in addition, gradually making the work more difficult. Take up subtraction and teach "borrowing." Let them verify their results by using objects. Continue the work in multiplication tables.

3. Third Quarter. Continue the work in addition and subtraction and in the multiplication tables. Teach the pupils to multiply by one-eighth multipliers. Review the denominate numbers of the previous years and make the work more difficult. Teach pupils to read the thermometer.

4. Fourth Quarter. Continue work in addition and subtraction. The multiplication tables should be thoroughly mastered to ten times ten. Do not be afraid to drill. Drill work can be made interesting if you can cultivate the spirit of friendly rivalry among the pupils. Teach pupils to check multiplication.

Class A — Seventh Year

1. First Quarter. One half of this quarter should be spent in a review of the fundamentals. Finish the quarter by taking up percentage more fully than in the sixth year. Profit and loss problems furnish excellent material for the application of the principles of percentage to practical problems.

2. Second Quarter. Teach simple interest by the direct method. After the principles of simple interest are well understood, teach thoroughly the aliquot part method, as this is the fundamental business method. In connection with interest teach the pupils to write promissory notes and endorse checks and notes, and to fill blank forms of notes. About three-fourths of the quarter should be spent on interest. Finish the quarter by teaching banking and bank discount.

3. Third Quarter. Business method and accounts. Exchange. Teach pupils how to keep accounts. Teach trade discount, cash discount. Make pupils familiar with money orders, drafts, etc.

4. Fourth Quarter. Corporation, coöperation, partnership, insurance, taxes, and revenues. Teach stocks and bonds, dividends, and brokerage. Spend some time on studying insurance.

3. Language and Grammar

Class C — Third Year

(Only one quarter of year's work given)

1. First Quarter.

1. *Oral Composition.* Both for oral work as such and to precede written composition. Topics from other subjects furnish material for work and experiences of children.

- (a) Relating of Personal Experiences.
- (b) Descriptions of Games.
- (c) Descriptions of Objects from Nature Study.
- (d) Reproduction of Stories.

2. *Written Composition.* Work should consist of the following:

- (a) The topics developed in the oral composition should be written out. Emphasize the paragraph everywhere.
- (b) Give as much attention to children as possible while they are writing. Place difficult words and simple outline on the board.
- (c) Occasionally work out a story on topic on the board, class contributing as in first two years.
- (d) Give help in orderly arrangement of ideas, construction of sentences, choice of words and phrases and in correction of mechanical details.
- (e) Letter Writing. Copy a model letter written by the teacher. Let teacher and children compose a letter written to an absent classmate. Write invitations to mothers and fathers to come to visit the school.
- (f) Picture Study. Let the teacher study a few suitable pictures and then aid the children in this.

3. *Formal Work.* Review by use all previous work with capitals and punctuation. Apostrophe in possessive case singular. How to divide a word at end of line. Correct forms of abbreviations. Irregular verbs as needed. Teach use of polite forms. Discourage such forms as: *done gone, I taken*, etc. Teach paragraphing, spacing, margin. Begin use of pen and ink.

Class B — Sixth Year

(Only one quarter of year's work given)

1. **First Quarter.** Nouns are to be studied as such, with their simpler classification. Singular and plural are distinguished; gender forms are learned; the possessive form receives more attention than heretofore. Uses of nouns in sentences may be noticed particularly. Pronouns should be studied soon after nouns. Their general use and classes are to be learned here, and incorrect forms of speech and writing are to be especially noted. Sentence analysis should also be stressed somewhat now. From simpler elements we can pass to larger and more complex ones. Phrases need to be clearly understood. Compound and complex sentences can now be distinguished from simple sentences.

Class A — Eighth Year

(Only one quarter of year's work given)

1. **Second Quarter.** Verbs should be given an entire quarter. All their forms, uses, agreements, and combinations are to be worked out carefully. Parsing, conjugation, analysis, critical definition, drill — these are all to be done over and over. Verbals are to be studied here with care as the last work — that is, infinitives, participles, and verbal nouns. Observe the closing suggestions made during first quarter of eighth year. The teacher should supply much drill, both oral and written, in the proper use of verbs in all their various forms.

4. History and Civics

Class C — Third Year

(Only one quarter of year's work given)

1. First Quarter.

1. *The Indian of the Plains.* Class, position of chief, party, tribe, Indian houses, the Indian baby, distinction between work of man and woman, foods, use of fire, domestication of animals, work in metal, wood, and stone, pottery and basketry, methods of travel on water and land, money used, war, the war dance, implements of war, methods of warfare, the medicine man, religious ceremonials, death and burial, future life.

2. *The Eskimo.* Contrast the Eskimo with the Indian of the Southeast as to points listed under study of the Indian of the Plains.

3. *The Indian of the Southwest.* Contrast the Eskimo with the Indian of the Southwest as to the points listed under study of the Indian of the Plains.

Class D — Fifth Year

(Only one quarter of year's work given)

1. First Quarter.

1. *Before the Revolution.* The story of Patrick Henry, the story of Samuel Adams, and the story of Benjamin Franklin.

2. *The Revolution.* The teacher in her talks to the class, in telling a story, in material read to the pupils, and in assigned readings has been building up a background of understanding for this topic. Vividness, realness, and concreteness are the keynotes to interest and understanding in these discussions. The teacher here may reinforce her history work in the literature course by the reading of "Paul Revere's Ride." The close correlation in geography should be emphasized.

3. *George Washington.* Time may be saved in this topic by a quick, interesting review of Washington's early life in Virginia and as connected with the French and Indian Wars. This part of his life is included in the fourth year. In the fifth year the emphasis should be placed on his work in the Revolution. "Washington in Command of the Army," "In the Northern Campaign with Washington," and "The Winter at Valley Forge" are important topics. Other interesting phases of his work will be noted in the stories of other heroes of the Revolution in the following topic.

4. *Other Revolutionary Heroes.*

Nathan Hale

Francis Marion

Nathanial Green

John Paul Jones

Daniel Morgan

Lafayette

These characters give types for study to show important situations and movements in the Revolution.

Class B — Sixth Year

(Only one quarter of the year's work given)

I. First Quarter.

1. *The Greeks — Our Earliest Teachers.* Before starting into the direct study of the topic, it would be well to give one or two periods to the discussion of the aims and purposes of the course that the pupils may have an intelligent idea of the study. These introductory lessons are very important, and much depends upon the teacher's knowledge of subject matter, and her method.

- (a) *Geographical Conditions in Greece.* The problem might be considered — "Why is Greece a Sailor Country?" This problem will involve the consideration of Greece from a geographical standpoint. This will lead to the reasons for expansion.
- (b) *Greek Boys and Greek Men.* Sparta and Athens should be studied pretty much in detail here. Pictures will re-

inforce the material gained from reading. Dramatization may be used for interest and to illuminate. The stories of Pericles and Socrates show the great gifts to modern life in art, philosophy, and literature that come from this wonderful age.

- (c) The Spread of Greek Civilization. The story of Alexander the Great may be used to show the spread of the Greek's way of living. The stories of the youth of Alexander are very interesting to the pupils. Through their reading and discussion the pupils see that Alexander is essentially Greek by reason of his education and ideals. He naturally becomes the ruler of Greek territory and of the lands beyond the Mediterranean Sea. Map study to trace Alexander's marches is very profitable.

2. *The Romans as the Successors to the Greeks.*

- (a) How the Romans Began. This topic may be introduced by a quick review of the study of Æneas and of Romulus and Remus. Follow this with some geographical conditions and environment.
- (b) The Struggle between Rome and Carthage. The wars between Rome and Carthage are emphasized because of their importance in the history of Rome and because of the vigorous personalities of their great leaders.

Class A — Eighth Year

(Only one quarter of the year's work given)

1. Fourth Quarter.

1. *History and Government of Missouri.*

- (a) History of Missouri. Early settlements and pioneers of Missouri, Indian troubles, the struggle for admission to the Union, slavery in Missouri, the three constitutions of the state, important men of the state, Missouri's educational institutions.

- (b) Government. Study the different articles of the state constitution. Note carefully the different departments of government and their duties, state officers, etc.
- (c) The County. Note duties and responsibilities of the county and probate courts. Make a list of the county officers and note the duties and responsibilities of each.
- (d) The City. Note provisions the cities have for executive, judicial, and legislative departments. Study chief officers of the city and their duties.
- (e) The School District. How, when, and for what term are school boards elected? What are the duties of school board members? What is the valuation of your district? What is the rate of taxation for school purposes? Does your district have sufficient funds to maintain a good school?

5. Nature Study

Class D — First Year

(Only one quarter of the year's work given)

1. First Quarter.

1. *Biologic Approach.*

- (a) Plants: gather wild flowers for bouquets in schoolroom; teach children to call them by their correct names; compare flower colors; have flower games; study parts of a simple flower.
- (b) Animals: common animals with which the children are acquainted — domestic, pet, wild; their uses; their differences; animal preparation for winter.
- (c) Leaves: gather colored leaves; study the colors; which kinds have the most color; study different kinds of leaves — shape, etc.

2. *Hygienic Approach.* Care of the hands; how to tell when clean; how to keep clean; how to prevent chapping; care of nails; use of the nails; care of the hair; why it should be combed and brushed; use of the hair.

Class B — Fifth Year

(Only one quarter of year's work given)

I. First Quarter.**1. *Biologic Approach.***

- (a) Cultivate flowers; study different wild flowers of the community; how to distinguish each; your preference; why?
- (b) Vegetables: different kinds; uses of each; how to keep each for winter use; which are best food; which are most easily raised in this vicinity.
- (c) Wild flowers: different kinds of wild flowers in your community; how to distinguish each.
- (d) Trees: different kinds of trees in your community; uses of each; different parts of tree and uses of each part.
- (e) Animals as friends and foes; how to control them.

2. *Hygienic Approach.*

- (a) Breathing: breathing exercises should be taken on playground, on the way to school, and upon rising in morning.
- (b) Digestion: structure of organs, processes, and results.
- (c) Absorption: show how the blood gets its food for the body; review circulation and uses of food.

3. *Physical Approach.* Have children engage in various playground games.

4. *Geographic Approach.* No attempt should be made to explain the more difficult principles; but local observation showing the changes from day to day should be made. These relate to pressure, temperature, moisture, winds, storms, and the condition of the sky. Simple experiments may be introduced to show that the air has weight; records of temperature at different hours and places should be tabulated; lastly, force and direction of wind should be noted.

5. *Agricultural Approach.* Crop pests: how each pest affects plant; how to control each; how to recognize each.

Class A — Eighth Year

(Only one quarter of year's work given)

1. First Quarter.

1. *Live Things.*

- (a) Hogs. Study both lard and bacon types of hogs, observing characteristics of each; name the principle breeds of hogs and learn characteristics of each. Study balanced rations for hogs; kinds of feed preferable, kinds available in locality. Housing, marketing, and butchering of hogs.
- (b) Dairy Cattle. Study importance and extent of the dairy industry in the United States; in Missouri. Study history and characteristics of leading dairy breeds. Compare milk-producing ability of these breeds and their rank in per cent of butter fat. Select best types in neighborhood and score. Get as many different breeds as possible. Describe the ideal head, forequarters, body, hind quarters, udder.

2. *Dairy Industry.*

- (a) Dairy Products. Composition of milk. Importance of milk as food. Construction of dairy barn, ventilation, and sanitation. Considerable work should be done with Babcock tester; urge pupils to bring samples from home for testing. Study process of butter making. Show the necessity of cleanliness in butter making, as well as in milk production.

6. Geography

Class A — Seventh Year

(Only one quarter of the year's work given)

1. First Quarter.

1. *Geography of North America and the United States.*

- (a) Location and Size: (1) North America. (2) United States.

- (b) Surface: (1) Mountain systems. (2) Plateaus. (3) Plains and valleys.
- (c) Drainage: (1) River systems. (2) Lakes.
- (d) Climate: Review location with reference to prevailing easterlies, north horse latitudes, and northeast trades. Rainfall in principal sections. Point out the relation between distribution of rainfall and plant production.
- (e) Life: (1) Vegetable. (2) Animal. (3) Human.
- (f) Resources: (1) Minerals. (2) Forests. (3) Fisheries. (4) Fur-bearing animals.
- (g) Occupations: (1) Agriculture. (2) Manufactures. (3) Mining.
- (h) Commerce: (1) Routes: land and water. (2) Exports. (3) Imports.
- (i) Chief Cities: Name each and give reasons for location.

7. Physiology and Hygiene

Class A — Eighth Year

(Only one quarter of year's work given)

I. First Quarter.

1. *The Skeleton.* Purposes served by the skeleton. Composition and properties of bones. Plan of skeleton. The spinal column. The skull. The thorax. Shoulder and pelvic girdles. Arm and hand groups. Leg and foot groups. The joints.

2. *Posture and Health.* Troubles that arise from getting the body out of shape. What constitutes correct posture in sitting and standing; how attained and maintained. The dropping tendency; how overcome. Rules to be followed.

3. *Hygiene of Feet.* Troubles that arise from getting the feet wet. Anatomy and physiology of feet. Foot abuses and their results. How foot troubles interfere with general health. How to select hygienic shoes.

4. *The Muscles.* Structure and arrangement of voluntary muscles and their work. The heart muscles. Muscles in their relation to health and growth. Uses of muscles other than causing motion.

5. *Exercise and Health.* Effects of exercise upon the muscles. How exercise improves the circulation and digestion, and strengthens the nerves. The effects of overexercise.

6. *The Nervous System.* Divisions of, and its general plan and purpose. Nerve cells and their arrangement. The brain and the spinal cord. The nervous system in relation to growth and health.

8. Spelling

Class C — Third Year

(Only one quarter of year's work given)

1. First Quarter.

1. *Text.* Hunt's *Speller*, pp. 9 to 20.
2. *Drill.* During this quarter drill on the following:
 - (a) Elementary sounds.
 - (b) Syllabication and accent.
 - (c) Pronunciation of words.
3. *Test.* Test children's spelling ability by use of Ayres' "Measuring Scale for Spelling Ability."

Class A — Seventh Year

(Only one quarter of year's work given)

1. First Quarter.

1. *Text.* Hunt's *Speller*, pp. 141 to 150.
2. *Homophones.* Study of homophones.
3. *Origin of Words.* Study of origin of words.
4. *Synonyms.* Study of synonyms from different languages.
5. *Definitions.* Defining words by phrases.

9. Penmanship

Class C — Fourth Year

Abundant practice, form of letters and movement equally important, with increasing attention to letter formation in the fourth grade. At end of this year, pupils should be able to write well with muscular movement. Rate expected at close of fourth year, twenty-five to thirty-five letters per minute. Text: *Ransemerian System of Penmanship for Fourth Grade*.

10. Handwork

Class B — Sixth Year

(Only one quarter of year's work given)

1. First Quarter.

1. *Boys*. Projects: Sack holder, nail box, tool carrier, work bench, tool rack, sled, wagon. Text: Blackburn's *Problems in Farm Woodwork*.

2. *Girls*. Aprons, caps for cooking, embroidery, towels, tray covers, patching, laundry bag. Text: Woolman's *Sewing Course*.

CHAPTER III

THE EXPERIMENTAL SCHOOL CURRICULUM

I. THE THREE GROUP PROGRAM

II. EXCURSION PROJECTS

III. HAND PROJECTS

IV. PLAY PROJECTS

V. STORY PROJECTS

CHAPTER III. THE EXPERIMENTAL SCHOOL CURRICULUM

I. THE THREE GROUP PROGRAM

TIME	FIRST GROUP	SECOND GROUP	THIRD GROUP
9:00- 9:30 9:30-10:00 10:00-10:30	Story Projects	Story Projects	Story Projects
10:30-10:55 10:55-11:20 11:20-11:45	Hand Projects	Hand Projects	Hand Projects
11:45-12:15	Noonday Luncheon		
12:15- 1:15	Playground Games		
1:15- 1:40 1:40- 2:05 2:05- 2:30	Play Projects	Play Projects	Play Projects
2:30- 3:00 3:00- 3:30 3:30- 4:00	Excursion Projects	Excursion Projects	Excursion Projects

The above daily program of studies is the product of four years' experimentation in an attempt to solve the two fundamental problems involved in formulating a daily program for the one-teacher school: (1) classification of projects; and (2) grouping the children.

1. Classification of Projects

The above program of studies represents four types of child projects — Play, Excursion, Story, and Hand — experimentally determined on the basis of affording boys and girls opportunity to realize their own purposes during the operation of the Experimental School. Play Projects represent those experiences in which the purpose is to engage in such group activities as games, folk dancing, dramatization, or social parties. Excursion Projects involve purposeful study of problems connected with environments and activities of people. Story Projects include purposes to enjoy the story in its various forms — oral, song, picture, phonograph, or piano. Hand Projects represent purposes to express ideas in concrete form — to make a rabbit trap, to prepare cocoa for the school luncheon, or to grow cantaloupes.

Such a classification of child projects has, in addition, practical considerations. In the first place, it indicates the kind of purposes in which boys and girls normally engage.¹ It thus assists the teacher in providing a school environment suggestive of such purposes. In the second place, projects involving similar procedure in execution are grouped under one head, and this grouping enables the teacher to utilize the most effective method in pursuing them. The procedure that normally prevails in making a doll dress differs greatly from the one in telling the "Gingerbread Boy" story. In the third place, such a classification facilitates school administration around types of activity that enable children to work together effectively at the same time, such as, for instance, outdoor study (Excursion Projects), noisy work (Hand Projects), comparatively quiet activity (Story Projects), and group activity (Play Projects).

2. Grouping Children

The three group organization shown above is the result of four years of experimentation in an attempt to group children on a

¹ Justification of such a classification is stated more comprehensively in Chapter VI.

natural basis. This experimentation has revealed two facts fundamental to the organization of the one-teacher school. First, the grade organization patterned after the city school is an impossible organization.¹ Its provision for about twenty-five different classes per day makes it absolutely impossible for the most efficient teacher to do real teaching. The eight grade groupings practically prohibit the growth of many of the social traits of boys and girls since many of these groups have no more than two or three children. It reduces the school, as the writer sees it, to an artificial, individualistic procedure instead of providing for natural, social participation. Second, the mental, social, and interest factors are the fundamental points to consider in grouping children of the one-room country school. Similarity of mental abilities should be one of the guiding principles. Provision for sufficient number of children in each group to insure natural, social participation should be another. A third principle of fundamental importance is similarity of the interests of boys and girls.

Actual experimentation on such a basis seems to show that children of the one-teacher country school divide themselves into three groups. Group one includes, in most instances, children six, seven, and eight years old; group two, children of nine, ten, and eleven years; and group three, twelve-, thirteen-, and in some instances fourteen-year-old children.

This three group organization provides for a very flexible schedule of conferences. Theoretically, the minimum number of daily conferences is four, while the maximum is twelve. That is, in case the three groups united in executing the four types of projects, the number of work conferences would be reduced to four daily, each one hour and thirty minutes in length. On the other hand, each group working separately would increase the number to twelve thirty-minute conferences daily. Practically, many combinations occur at the same time. The three groups may, for instance, at the first conference period work separately

¹ Dunn, Fannie W., *N. E. A. Proceedings*, 1921.

on Story Projects; at the second period, the pupils may work individually on Hand Projects; and at the third and fourth periods, the three groups may unite in executing Play and Excursion Projects. In such instance, the number of work periods would be six daily.

The obvious advantage of such an organization is the opportunity afforded pupils by means of the larger groups and longer work periods to engage actively in working out their purposes effectively. In addition, such an organization provides rich opportunity for natural expression of the social traits of children. For instance, it is possible for the eight-year-old pupils of the first group to assume leadership in the group's work, while the six-year-old pupils might quite naturally be the followers in some phases of the work. Then, too, boys and girls find that coöperation, fair play, and initiative are functioning factors in realizing their purposes in such a democracy of childhood.

II. EXCURSION PROJECTS

I. The Projects of the First Group

Mrs. Murphy's Sunflowers

I. The visit to Mrs. Murphy's sunflowers. Carl one day in conference¹ with the other pupils of his group wanted to know why Mrs. Murphy grew sunflowers along the rear end of her vegetable garden. He remarked in this connection that he couldn't understand why she grew them at all in the garden as he thought flowers should be grown in the yard. Dean suggested at this point that people grew flowers in the garden as he had seen many in the gardens of the homes in Granby where he formerly lived. Virgil wanted to know if Dean thought that the garden was the proper place to grow flowers since he thought that it was a place to grow vegetables. Iona said that she had never seen sunflowers

¹For a detailed statement of method used in selecting and working out projects see Chapter VII.

and asked Carl what they looked like. Carl did his best to describe for Iona how the sunflowers that he had seen in Mrs. Murphy's garden looked. Iona remarked that she would like to see them as she had never heard of such flowers before. Other pupils stated that they were like Iona in this respect and that they would like to see Mrs. Murphy's sunflowers. After further discussion along this line, the pupils finally decided to visit Mrs. Murphy's on the next day. They agreed on two things to find out on this visit: (1) why Mrs. Murphy grows sunflowers along the rear end of her vegetable garden; (2) how the sunflower differs from other flowers.

2. Results of the visit to Mrs. Murphy's sunflowers. The pupils visited Mrs. Murphy's on the next day as planned. They discussed with her the reasons why she grew sunflowers in her garden, and observed the color and shape of the flower, kind of seed, how the seeds are distributed, kind of stem and leaves, cultivation, etc. Mrs. Murphy told the children that she grew sunflowers along the rear of her garden to protect her cucumber vines from the hot evening sun. She said that they were excellent for this purpose. In addition to this use, she told them that sunflower seeds were very fine chicken feed and that the way she used them for this purpose was to cut the sunflower head from the stem and throw it out among her chickens and let them remove the seeds from the head. At this point she reached up and broke off a large sunflower head and pitched it over the fence to her chickens to show the children how fond her chickens were of the seeds. She stated that she thought the sunflower was very beautiful and that her mother always grew some each year in her yard for decorative purposes. She gave the pupils some seed to plant at home, as this type of sunflower was uncommon in that community. She stated in this connection that the sunflower was very easy to grow and pointed out to the children how to plant the seed and cultivate the sunflower plant.

3. The report of the visit to Mrs. Murphy's sunflowers. The pupils spent some time in discussing and reading in reference books

about the things that they had found out on their visit to Mrs. Murphy's, such as the uses of the sunflower, its cultivation, etc. They decided to grow some at home the next spring. Carl said that he intended to plant a row on the west side of his cantaloupe patch to protect it from the hot evening sun during the summer. Neva stated that she thought the sunflower was the prettiest flower that she had ever seen and that she was going to grow some in her yard next spring. Dean remarked that he believed that the best use of the sunflower was for chicken feed and that he planned to grow a patch for that purpose. And various other similar remarks were made by the pupils. Each pupil in this connection made a record with the assistance of the teacher of his visit to Mrs. Murphy's. The record contained a crayola drawing of the sunflower and a written account of what they had discovered in this study of the sunflower. Carl's report, given on the next page, is typical of the pupils' reports.

4. Associated project. During the study of the sunflower project, the following associated project was suggested by the pupils and selected by them for later study:

How does Mrs. Murphy's sunflower differ from the wild sunflower?

5. References used by pupils in this project.

Progressive Road to Reading: Story Steps, p. 11.

Progressive Road to Reading: Book One, p. 17.

New American Readers: Book One, p. 23.

Elson Readers: Book Three, p. 45.

Brook's Readers: First Year, p. 14.

Wheeler's Readers: Second Reader, p. 21.

Studies in Reading: Book Two, p. 31.

Reed — *Flower Guides* (Sunflower).

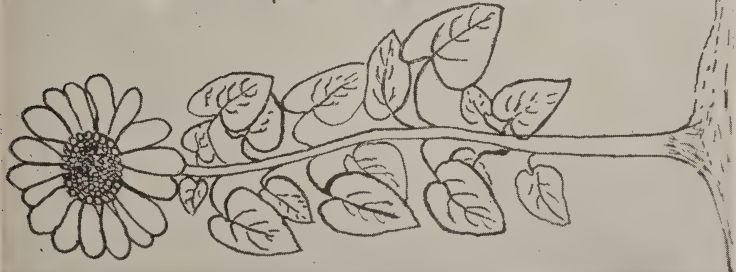
Comstock — *Handbook of Nature Study*, p. 121.

Hodge — *Nature Study and Life*, p. 46.

Lantern Slides: "Wild Flower Pictures."

Stereograph Pictures: "Wild Flowers."

Stereograph Pictures: "Yard Flowers."



The Sunflower

Mrs. Murphy uses her sunflowers to shade her cucumber vines. The sunflower has a big yellow flower. Mrs. Murphy's chickens like sunflower seed. She gave us some seed to plant. Sunflowers make pretty yard flowers. I am going to grow some in my cantaloup patch next summer to shade my cantaloups. They grow best in a rich soil, sunshine, and moisture. They are easy to grow.

Other Projects

In similar fashion the following projects were selected and worked out by the pupils of this group during the four years that the Experimental School was in operation:

1. How Mr. Chase shears his sheep.
2. How Mr. Long makes molasses.
3. How Mrs. Guinn grows such pretty yard flowers.
4. How the pine tree differs from the cedar.
5. Gathering chinquapins.
6. How Mr. Slocum picks his cotton.
7. Watching the turtle cross the branch.
8. How Mr. Chase's wheat is threshed.
9. How Mr. Guinn grows such big pumpkins.
10. Gathering walnuts.
11. How apple tree blossoms differ from peach tree blossoms.
12. Gathering persimmons.
13. Watching Mr. Statler spray his watermelon vines.
14. How Mr. Long crates his cantaloupes for shipment.
15. Hunting hazelnuts.
16. How Mrs. Murphy grows house flowers.
17. How the dandelion spreads so rapidly.
18. Watching Mrs. Edmonds spin cotton thread.
19. How Mrs. McDonald grows her hollyhocks.
20. Gathering wild flowers.
21. How tomatoes are canned at the local canning factory.
22. Watching Mrs. Edmonds weave on the old fashioned loom.
23. How Mr. Jones' new corn binder cuts corn.
24. How the snowbird lives in winter.
25. What are the different kinds of birds in our community?
26. Seeing Mr. Edmonds' new White Leghorn chickens.
27. Watching the caterpillar turn into butterflies.
28. How the hornet builds his nest in the woods.
29. Watching Jim set his traps on the branch.
30. How Mr. Williams candles eggs.
31. Tracking the rabbit to his winter home.
32. Watching the spider spin his web.

54 AN EXPERIMENT WITH A PROJECT CURRICULUM

33. Seeing Tommie's little puppies.
34. Fishing on Indian Creek.
35. How Mrs. Guinn cares for her goldfish.
36. How Jeff cares for his pet squirrels.
37. Seeing Mr. Roseberry's deer.
38. Riding Jim's Shetland pony.
39. How Mrs. Daugherty raises such pretty kittens.
40. Seeing Mr. Edmonds' fine Jersey cows.
41. How Mr. Murphy cares for his sheep in the winter.
42. How a sheep differs from a goat.
43. An invitation to Mr. Beavers' colt show.
44. How Mr. Brook cares for his Poland China pigs.
45. How lumber is sawed at Mr. Keller's mill.
46. How Mr. Bower's tractor works.
47. What we will see at the big circus at Neosho.
48. Finding out how wheat flour is made at McNatt.
49. How Mrs. Bosserman picks her geese.
50. Catching minnows for our fish aquarium.
51. Watching Mr. Statler screen his seed wheat.
52. Catching frogs for our aquarium.
53. How Mrs. Smith cares for her pet canary bird.
54. How Mr. Bosserman's new house is furnished with electric lights, water, and heat.
55. How Mrs. McDonald's pet parrot talks.
56. Watching Mr. Jones plant his corn with the new corn planter.
57. How Mr. Chase's Holstein calves differ from Mr. Edmonds' Jersey calves.
58. How the lamb differs from the kid.

2. The Projects of the Second Group

What Are the Causes of Typhoid in Mr. Smith's Home?

1. **The visit to Mr. Smith's home.** The chairman of this group of pupils reported at the first meeting on one Monday morning the absence of Mary and Johnnie Smith. He inquired in this connection of the pupils if anyone knew the cause of their absence from school. Tommie, a neighbor, reported that both

were ill with typhoid. He remarked in a rather sympathetic manner that some members of the Smith family were stricken every fall with typhoid, and that his mother could not understand the prevalence of this disease in that home. Other pupils recalled, at this point, the death of William, an older brother, as a result of this disease a short time ago. The discussion then switched from the Smith family to cases of typhoid in the community. Several pupils stated that no such disease had occurred in their homes; others reported cases either in their homes or in the homes of neighbors. The pupils, however, discovered in this connection that no family so far as they knew, had had typhoid every fall as did the Smith family. Like Tommie's mother, they were at a loss to explain this unfortunate situation.

They discussed various possible causes of this attack, suggested largely by similar experiences in the homes of the community. Tommie was sure that the well water was the cause; Sam stated that polluted milk had caused typhoid in his home; Minnie thought that flies caused typhoid in the home of her neighbor; Fred said that he had heard Dr. Call say that uncleanness in and around the home would cause typhoid; and many similar suggestions were made. After considerable discussion, the pupils agreed that any one of these suggested causes might have caused typhoid in the Smith family, but which one was the probable cause in this particular instance they were unable to decide. During this latter discussion, Onal suggested that it would be necessary to know the conditions in and around Mr. Smith's home before anyone could be able to say what was the likely cause of typhoid in this home. Other pupils readily agreed that such information was necessary, and that the best method of securing it would be to visit the home of Mr. Smith and observe such conditions.

How to go about this was perplexing. Some pupils thought that such a visit would offend Mr. Smith; others feared that they might get typhoid. A discussion of these issues resulted in the appointment of Tommie, a neighbor, to interview Mr. Smith

regarding such a visit and to say to him that the school desired to coöperate with him in finding out the causes of typhoid in his home. Tommie reported the next day that Mr. Smith would be more than glad to have the pupils study the conditions in and around his home. As to the second difficulty, the pupils decided that there would be no danger in getting typhoid if each would refrain from handling and eating things while on this visit. These difficulties out of the way, Minnie wanted to know what she should look for. After discussing her question for some time, the pupils decided on the following as the most significant things to observe: (1) Does the home have many flies and are the windows and doors screened? (2) Is the drinking water of the home pure and where is it located? (3) How is the milk handled and where is it kept? (4) Is the home free from the following: manure piles, weeds and garbage, exposed outhouses, and open garbage pails?

The plan for the excursion thus formulated, the pupils visited Mr. Smith's home on the next day. Minnie on her own initiative surprised the teacher and pupils by bringing to school next morning a large bouquet of yard flowers for Mary and Johnnie. The visit was successful from every point of view, and the Smiths seemed happy to have the school children visit their home. Just before leaving, Mr. Smith quite naturally asked the pupils what they thought were the causes of typhoid in his home. Since they had anticipated such a question, they agreed before visiting Mr. Smith's home that they should withhold any conclusions until they had studied the facts carefully. So Tommie, chairman of the group, told Mr. Smith, in reply to his question, that the group would be glad to send him a report of what they considered the causes of typhoid in his home just as soon as they considered the facts that they had observed.

2. The results of the visit to Mr. Smith's home. At the next meeting of the group, the pupils discussed at some length, in light of their reference readings, the conditions observed in and around Mr. Smith's home. They found that his drinking water

could not have been a probable cause of typhoid, since the well was located on much higher ground than the dwelling and other buildings; that it had been cleaned recently; and that it had a good concrete top and curbing. The polluted milk theory advanced by some pupils had to be abandoned too, for the reason that no milk was used in the home. On the other hand, they found the home swarming with flies; no screens to the doors and windows; and very unsanitary surroundings — hog pen adjoining the yard, large manure piles in the barnyard, the yard full of weeds, and open garbage pails swarming with flies. These conditions suggested the fly theory as the most probable cause of typhoid in Mr. Smith's home. At this point, the pupils spent some time studying conditions surrounding homes that they had previously noted had had cases of typhoid. Out of ten such cases all, with the exception of two, had somewhat similar conditions — doors and windows without screens, barnyard with manure piles, open garbage pails, weeds in yard, and house swarming with flies. The pupils discovered that the reference books and bulletins were almost unanimous in advancing the fly as the most probable cause of typhoid. After considerable discussion, the pupils concluded, in the light of all facts thus far discovered, that the most probable cause of typhoid in Mr. Smith's home was the fly.

3. Associated projects. Out of the study of the causes of typhoid in Mr. Smith's home, the following associated projects were suggested by the pupils and selected for later study:

1. Is typhoid the most prevalent disease in our community?
2. How can Mr. Smith best combat the fly in his home?

Since the pupils had promised Mr. Smith a report on the probable cause of typhoid in his home, they decided, after considerable discussion, that it would be well to include in this report suggestive methods for combating the fly, since merely telling him the cause would not be of much service in preventing future cases of typhoid in his home. For this reason, the pupils decided

to work out the second associated project above so that they might include their findings in the report to Mr. Smith. Their development of this project is given in detail on pages 58-64.

4. References used by pupils in this project

O'Shea and Kellogg — *Body in Health*, p. 280.

O'Shea and Kellogg — *Health Habits*, p. 192.

O'Shea and Kellogg — *Health and Cleanliness*, chaps. X and XI.

Jewett — *Good Health*, p. 29.

Ritchie — *Primer of Sanitation*, p. 77.

Ritchie and Caldwell — *Primer of Hygiene*, p. 144.

"Causes of Typhoid," University of Missouri Bulletin. (Each pupil ordered a copy from the University of Missouri, Columbia.)

"Typhoid in the Homes," Health Crusade Bulletin. (Each pupil ordered a copy from the Anti-Tuberculosis Ass'n., St. Louis.)

Lantern Slides: "The Causes of Typhoid."

How Mr. Smith Can Best Combat the Fly in His Home

After considerable discussion, the pupils decided on two methods of attack: (1) to visit the modern home of Mr. Bosserman and observe how he combats the fly; (2) to investigate suggested methods for combating the fly in reference books and bulletins.

1. **How Mr. Bosserman combats the fly.** Minnie suggested that before making the visit to Mr. Bosserman's home they should discuss more definitely what they should observe, as she was not quite sure what one should look for in such a big home as Mr. Bosserman's. At first, the other pupils took Minnie's suggestion somewhat as a joke, since they had previously agreed that what they were to find out on this visit was how Mr. Bosserman keeps the flies out of his big house. Minnie retorted by saying that there were many ways for accomplishing this, as she had read in a

book recently about several methods for combating the fly, such as screening, fly traps, tanglefoot, spraying powders, fly swatters, destroying breeding places, etc., and that she wanted to know whether they were to observe one or all of these methods. The discussion resulted in a decision to observe the following points on their visit to Mr. Bosserman's: (1) How does he screen his doors and windows? (2) Does he use fly traps? What kind? (3) Does he use fly swatters? Tanglefoot? Spraying powders? Poisonous liquids? (4) How does he care for the house garbage? (5) Are there weeds and rubbish in the yard? Manure in the barnyard?

In observing the conditions in and around Mr. Bosserman's home and in discussing with Mr. and Mrs. Bosserman the best methods for combating the fly, the pupils discovered that the methods used in this modern home were:

1. Screening the doors, windows, sleeping porch, dining room porch, and milk house.
2. Destroying all rubbish and weeds in and around the home.
3. Keeping all refuse and slop in covered garbage cans.
4. Hauling out the barnyard manure regularly.
5. Trapping the fly during the warm months of July, August, and September.
6. Swatting the fly during the cool months of October, November, and December.

Mr. Bosserman used no fly tanglefoot, spraying powders, or poisonous liquids in his home. He told the pupils that these were very dangerous and inefficient methods for combating the fly.

2. Methods suggested by reference books and bulletins. The pupils investigated various books and bulletins for methods of combating the fly. They were particularly interested in two problems: (1) What were the methods suggested by each reference? (2) Why were these methods recommended? After spending some time reading and discussing suggested methods in light of these two questions, the pupils found that the references were

almost unanimous in recommending the following methods as the most effective ways for combating the fly:

1. Screen doors and windows.
2. Haul out barnyard manure.
3. Make privies fly proof.
4. Clean the yard from all weeds and rubbish.
5. Keep all refuse and slop in covered garbage cans.
6. Trap the fly during hot months.
7. Swat the fly during cool months.
8. Practice clean housekeeping.

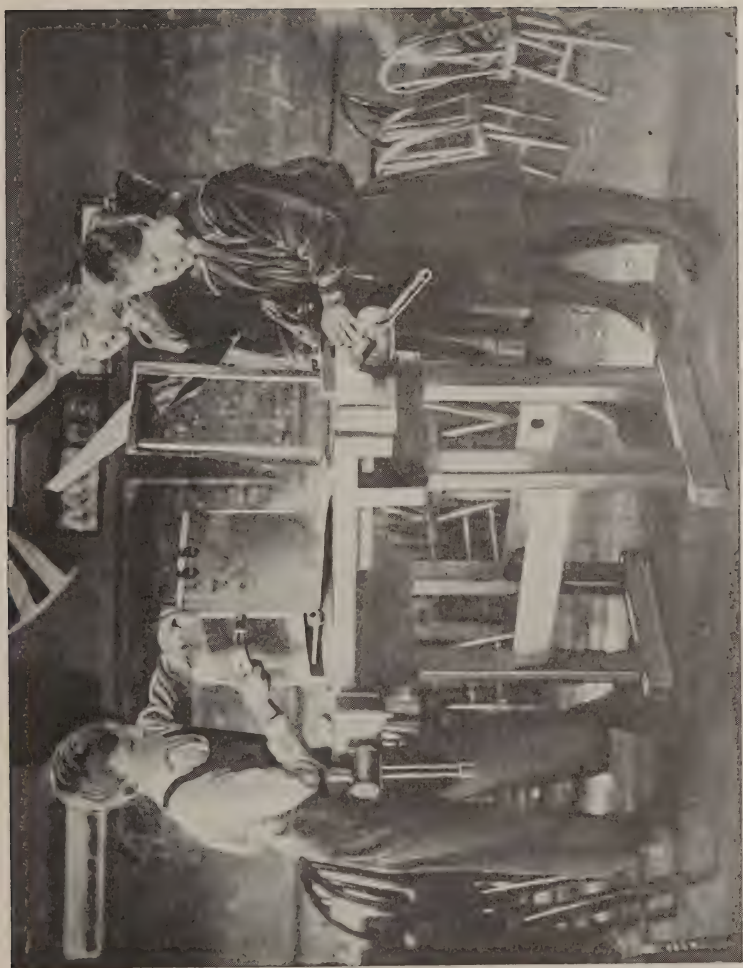
3. Best methods for Mr. Smith to use in combating the fly.

The pupils worked out what they considered the best methods for Mr. Smith to use in combating the fly in his home. They took into consideration those methods that Mr. Bosserman and the references recommended which particularly fitted into the conditions found at Mr. Smith's. Knowing that it would be impossible for Mr. Smith to comply with all the methods at once, the pupils selected those that they were sure he could put into practice immediately. The recommendations were:

1. Screening the two outside doors and three windows of Mr. Smith's home.
2. Destroying the weeds and rubbish in the yard and surrounding the home.
3. Removing the hog pen that adjoins his yard.
4. Hauling out the manure piled in his barnyard.
5. Keeping all refuse in covered garbage cans.
6. Using the fly trap in the home during warm months.

4. Associated projects. The following associated projects were suggested and worked out by the pupils in connection with the study of the best methods for combating the fly:

1. How to make a fly trap.
2. How to make a garbage pail and cover.
3. How to write a letter ordering the bulletins.
4. How people combat flies in the homes of our community.



MAKING A FLY TRAP FOR MR. SMITH

5. References used by the pupils in this project.

Lantern Slides: "How to Combat the Fly."

"The House Fly," *Farmers' Bulletin* No. 851.

"Fly Traps and Their Operation," *Farmers' Bulletin* No. 734.

"The House Fly," *University of Missouri Bulletin* No. 25.

"The Fly Trap," International Harvester Company Bulletin.

(The pupils prepared letters ordering copies of the above bulletins for use in the study of this project.)

6. The report to Mr. Smith. The pupils in making their report to Mr. Smith on the probable cause of typhoid in his home were confronted with three problems: (1) What should the report contain? (2) Who should write the report? (3) How could the report be delivered to Mr. Smith?

1. *Formulating the report.* After considerable discussion, the pupils agreed that the report should consist of two parts: (1) the probable cause of typhoid in Mr. Smith's home; and (2) the best method for eradicating this cause. They decided that the first part should contain a statement of the probable cause of typhoid, accompanied by some proof that that was the probable cause; and that the second part should recommend methods for combating this probable cause, with practical suggestions for putting into immediate use the recommended methods.
2. *Writing the report.* Several methods were suggested by the pupils. Tommie suggested that each pupil write out a report and bring it to the group conference on the next day; Minnie suggested that the teacher write the report; Fred suggested that the chairman of the group should write it; Onal suggested that a committee of three be named by the chairman to write the report. These various methods were discussed by the pupils. They finally concluded that the committee plan would be the best. The chairman was asked to appoint the committee which was to write the report to be read at the next conference for approval by the

group. The committee was appointed by the chairman, the report written, and read by the committee to the group at the next meeting. After several minor changes were made, the report was approved by the pupils.

3. *Delivering the report.* Since the pupils had decided to send Mr. Smith one of the fly traps and garbage pails made in school along with the written report, they were necessarily obliged to deliver the report in person. They solved this difficulty rather quickly. Since Tommie lived near Mr. Smith's home, Minnie at once suggested that he deliver the report to Mr. Smith. The group approved her suggestion and Tommie accepted the job.
4. *The report to Mr. Smith.* The following is a copy of the report worked out by the pupils and sent to Mr. Smith on the probable cause of typhoid in his home.

Experimental School,
Goodman, Missouri, R. A.
October 22, 1918.

Mr. R. W. Smith,
Goodman, Missouri, R. A.

Dear Mr. Smith:

This is the report that we promised to send you on the cause of typhoid in your home. We have spent several weeks studying this disease. We believe that flies, impure milk and water, and uncleanness are the causes of most typhoid in our homes. We find that your well water is not likely the cause of typhoid in your home. It is located on higher ground than your home and barn and has a good cement top and curbing. Bad milk cannot be the cause as we found that you were not using milk in your home. We noticed many flies in your home. Also that you did not have any screens to your doors and windows. We saw many flies in your kitchen. Our reference books say that the fly is the carrier of the typhoid germ. When he touches any food he leaves the germs on it. If people eat this food they get typhoid because they eat the typhoid germ. We believe that this is what happens in your home. We studied several other homes in our community where cases of

typhoid had been. We found similar conditions in these homes that we found at your home. Most all of them had flies and did not have any screens. Our reference books and bulletins ordered from the University say that the fly causes most cases of typhoid. We believe that the fly is the main cause of typhoid in your home and recommend that you use the following methods in fighting the fly in your home:

1. We recommend that you screen your two outside doors and three windows. Screening your doors and windows will keep flies out of your home. We have figured the cost of screening your doors and windows. We find that five yards of screen wire will cover your windows and that you can get it at the Goodman Hardware for thirty-five cents a yard, making \$1.75. You can get the screen doors for \$1.25 each, making \$2.50 for the two. The total cost would only be \$4.25.
2. We recommend that you cut and burn all the weeds and rubbish in your yard. Our books say that flies live in such.
3. We recommend that you move the hog pen that adjoins your yard fence. It attracts flies and makes a good breeding place for them.
4. We recommend that you remove the manure piles in your barnyard. Our books say that the manure pile is the best breeding place that flies can find.
5. We recommend that you keep all slop and scraps of food in a covered garbage pail. The dish water thrown out in the yard attracts flies and also supplies them with food.
6. We recommend that you use fly traps and fly swatters in your home. Mr. Bosserman uses the fly trap during the hot summer months of July, August, and September, and swats the fly during the cool months.

We are sending you one of our big fly traps and garbage pail with cover. We made these in school. We would like you to try them out in your home. We would like to know what you think of them.

We are glad to know that Mary and Johnnie will be back in school soon. We miss them.

We plan to have a community meeting soon to show some moving pictures on the fly. We will send you word by Tommie when we have the meeting. We are having the University of Missouri send you a bulletin called "The Fly."

Yours truly

Tommie Beavers, *Chairman*, Second Group.

5. *How Mr. Smith reacted to the report of the pupils.* Mr. Smith sent back word to the pupils by Tommie that he appreciated very much the fly trap and the garbage pail and that he would do his utmost in carrying out their recommendations. The most interesting part of this work of the pupils was the fact that they gained the confidence of Mr. Smith in their efforts to improve conditions in and around his home. Mr. Smith carried out all of their recommendations. Within four weeks he had screens to his doors and windows; had removed the manure piles from the barnyard; mowed the weeds out of his yard; and removed the hog pen. From that day on Mr. Smith has been a combatter of the fly instead of a breeder, and the result was that the next fall typhoid did not appear in his home.

Is Typhoid the Most Prevalent Disease in Our Community?

1. **The survey of the community diseases.** Onal, who had suggested this problem during the study of the causes of typhoid in Mr. Smith's home, was very much puzzled as to how they could find the answer to this question. Tommie suggested that each pupil make a report of the diseases that had occurred in his home. George objected to this suggestion on the ground that the pupils of the group represented only ten homes of the community and that if the question is answered properly it should include a study of all the homes of the district. The pupils spent some time discussing George's suggestion and finally concluded that the only way to solve this problem would be to make a survey of the diseases that had occurred in all the homes of the community. Three problems confronted the pupils now: (1) Over how many years should the survey extend? (2) How could they best make the survey? (3) What should the survey include?

In discussing the first problem the pupils decided that the survey should extend over the past two years, as such a period would very likely include all the diseases that attack the people of their community. After considering several different ways for making

the survey proposed by members of the group, the pupils agreed that the team plan suggested by Alfred would be the most effective way for making the study. They accordingly divided the group into three teams, assigning each team fifteen families to visit. In discussing the third problem of their plan, the pupils concluded that it would be necessary to find out all of the diseases that had occurred in the homes in order to determine whether typhoid had been the most prevalent during the two years. They formulated accordingly the inquiry to be made at each home visited. Onal suggested in this connection that the teams should explain at each home the reason why they were making the study, so as to be sure not to offend the parents interviewed. The other pupils readily accepted Onal's suggestion and decided that they should give this explanation before making the inquiry.

The Query

What diseases have you had in your home during the past two years?

2. The results of the survey. The pupils were successful in making the survey. Every home in the community was visited. They spent some time studying the data collected and methods for showing the results such as percentage computations, tables, etc. The survey revealed that forty-eight cases of influenza (severe cases of bad colds), eleven cases of typhoid, seven cases of measles, six cases of mumps, four cases of whooping cough, two cases of pneumonia, and one case of appendicitis had occurred in the homes of the community during the past two years. The data further revealed that influenza had occurred in 78%, typhoid in 23%, measles in 7%, mumps in 4%, whooping cough in 3%, pneumonia in 2%, and appendicitis in 1% of the homes during this period. While the pupils discovered that typhoid was not the most prevalent disease attacking the people of their community, it ranked much higher than any of the other diseases of its class.

3. Associated projects. During the study of community diseases, the following associated projects were suggested by the pupils and selected for later study:

1. What are the causes of bad colds?
2. Why do measles, whooping cough, and mumps attack children more than they do adults?
3. Why is it that Mrs. Chase believes that pneumonia is the most fatal disease?

4. References used by pupils in this project.

Hamilton — *Advanced Arithmetic*, p. 58 (percentage).

Lantern Slides: "Causes of Community Diseases."

Castor — *Illustrative Methods of Charting Data*.

Overton — *Advanced Physiology*, p. 89.

O'Shea and Kellogg — *Body in Health*, chap. III.

O'Shea and Kellogg — *Health and Cleanliness*, chap. VI.

Ritchie — *Primer of Sanitation*, chap. V.

"Community Diseases," University of Missouri Bulletin (ordered by pupils).

5. The report on the study of community diseases. Mrs. Chase on one of her visits to the school asked the pupils what they found out from their survey of community diseases. The pupils spent some time, one conference period, in going over the results of this study with Mrs. Chase. She remarked at the end of this discussion that it would be a good thing for the pupils to present the results of the study to the other parents, for she was quite sure that they, like herself, would be interested. The pupils promised Mrs. Chase that they would talk the matter over at the next conference and decide what they could do in preparing a community program. At the next conference, the pupils discussed the possibility of presenting the results of the study on community diseases at a community meeting. They agreed that it would be advisable to present the results of their study on typhoid along with this report. They spent some time making

graphic charts illustrating community diseases, methods of combating the fly, etc. One of these charts is shown on this

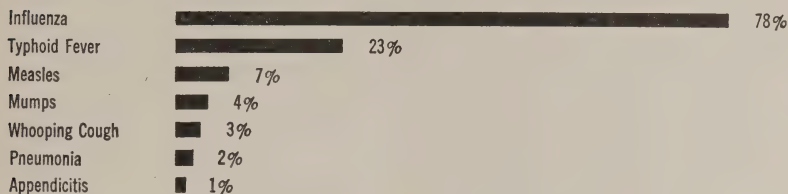


CHART I. Reduced size of chart used by pupils at community meeting to illustrate the occurrence of diseases in the homes of the community. The chart shows the per cent of homes in which diseases occurred during two consecutive years in the Experimental School district.

page. The pupils agreed on the following community meeting program.

COMMUNITY MEETING PROGRAM

Wednesday Evening at 7 P. M.

December 3, 1918

REPORT OF THE DISEASES IN OUR COMMUNITY

1. Community Singing
2. Illustrative Chart Showing the Diseases of Our Community (Jewell)
3. What Is the Probable Cause of Typhoid in Our Community? (Tommie)
4. Illustrative Chart Showing Methods Used by People of Our Community in Combating the Fly (Onal)
5. Demonstration of the Use of a Recommended Fly Trap (Alfred)
6. Illustrative Talk on How to Combat the Fly (lantern slides) (George)
7. Refreshments

WE SHALL BE GLAD TO SEE YOU AT THIS MEETING

UNDER DIRECTION OF SECOND GROUP

EXPERIMENTAL SCHOOL

Other Projects

In similar fashion, the pupils of this group worked out the following projects during the four years that the Experimental School was in operation:

1. How cream is separated from the milk at Mr. Edmonds' big dairy.
2. Finding out how Mr. Moser culls his fine hens.
3. How milk is tested for butter fat at Mr. Williams' store.
4. How Mr. Chase's modern poultry house is constructed.
5. Finding out how tomatoes are canned at the Bethpage Canning Factory.
6. How Mr. McDonald picks and crates his apples.
7. How ice is made at the Noel Ice Plant.
8. How wheat flour is made at the McNatt Roller Mills.
9. Finding out how Mr. Edmonds fills his big silo.
10. How wagon tires are reset at Mr. Burnham's shop.
11. How molasses is made at Mr. Long's mill.
12. Finding out how Mr. Lett makes house brooms.
13. How our home paper is published at the Pineville Printing Company.
14. Finding out how the county agent prunes Mr. McDonald's big orchards.
15. How our letters are delivered and forwarded at the Goodman post office.
16. How Mr. Chase sent his telegram from the Goodman railroad office.
17. How the county agent tests Mr. Jones' seed corn.
18. Finding out how Dr. Mustain makes false teeth.
19. How bread is made at the Pineville Bakery.
20. Grabbing fish on Cowskin River.
21. Finding out how the big oil tractor is used in working the public roads.
22. How coal is removed from the local coal mine on Indian Creek.
23. What we will see at the big circus at Neosho.
24. How Willie will be tried in the juvenile court at Pineville.
25. Finding out how the big steel bridge is being constructed across Cowskin River.
26. How people are cared for at the county poor farm.
27. How Mr. Chase's big farm sale is conducted.
28. How Mr. Beaver is drilling his new well.

29. How Mr. Brock is setting up his new windmill.
30. Watching Mr. Chase shear his goats with electric clippers.
31. Finding out how the county agent tests Mr. Slocum's farm soil.
32. How cider is made at Mr. Gary's.
33. How Mr. Slocum picks his cotton.
34. Finding out how Mr. Jones bales his timothy hay.
35. How the prices of Mr. Williams' shoes compare with Montgomery and Ward's.
36. How our school tables are made at the Neosho planing mills.
37. Why so many people of our community go to the Neosho harvest show.
38. How Salt Peter Cage got its name.
39. Where the Goodman lumber yard gets our pine lumber.
40. Demonstrating the big farm tractors at the Anderson Hardware.
41. How Mr. Bosserman's home is equipped with electric lights, water, and heat.
42. Finding out how Mrs. Murphy grows house flowers.
43. How Mr. Brock plans his vegetable garden.
44. Finding out how wheat is threshed at Mr. Chase's.
45. How Mr. Brock is constructing his new concrete silo.
46. How Mr. Holmes cuts his corn with the corn binder.
47. How Mr. Roseberry cares for his deer.
48. How Mr. Edmondson takes honey from his bees.
49. How Dr. Morgan vaccinates Mr. Jones' hogs.
50. How Mr. Bowers uses the big tractor in sowing wheat.
51. Participating in the Armistice Day program at Pineville.

3. The Projects of the Third Group

How Mr. Tate's Trial Will Be Conducted at Pineville

1. **A visit to Mr. Tate's trial.** Mr. Tate lived in the Experimental School Community. He had been charged with breaking into and robbing a store. His trial was set for the February term of Circuit Court at Pineville. Many people of the community were summoned as witnesses. Much talk was current in the community regarding the case against Mr. Tate. Some of the people expressed themselves rather freely in the belief that a poor

man like Mr. Tate had little chance of escaping a sentence; others thought that he was not guilty of the charge since this was the first known case against him.

There were points about this current discussion that the pupils could not understand to their own satisfaction. As the time for the trial approached they raised many questions in their group at school about what they had heard or seen regarding the future trial of Mr. Tate. Lee wanted to know why so many witnesses were summoned and what they had to do with the case. Neva couldn't understand how the sheriff selected the jurors (she had seen him pass through the community on his way to the eastern part of the county for this purpose). Ralph wanted to know what the jurors had to do with the case. Gladys raised the question as to what Attorney Puckett had to do with the trial since she had seen him in the community a few days ago taking depositions. May said that she was all mixed up and could not understand how so many people could have a part in Mr. Tate's case. And various other similar questions arose. During the discussion one day, Ralph said that he would like to visit the trial of Mr. Tate and see how it was conducted. He remarked that his parents were planning to attend. Edith said that her parents were going, too, and that she certainly would like to observe the trial procedure. Out of this discussion, the group decided to visit Pineville on the day of Mr. Tate's trial and attend the trial.

Two problems now confronted the pupils: (1) how they could provide transportation, and (2) what they should observe at the trial. The first problem was disposed of rather quickly since the parents of all the pupils of the group planned to attend this case with the exception of Ralph's. They agreed that the best way to go would be for them to accompany their parents, and that Ralph could go with the teacher. They agreed to meet in the court yard at 10 A.M. on the day of the trial. The second problem was more perplexing. After considerable discussion one day, they agreed that the best way to attack this problem would be for each pupil to find out from the reference books and his parents

all that was possible and report to the group at its next meeting. At the next meeting of the group the pupils discussed such questions as the selection of the jury, presenting the evidence, what the judge does, officers of the court, etc. After spending some time discussing such problems the group agreed upon the following points to observe in the conduct of Mr. Tate's trial: (1) how the jury is selected; (2) what the judge does in conducting the trial; (3) how the evidence of witnesses is presented; (4) what the attorneys do in the case; (5) what part Mr. Tate plays in the trial; (6) what part the Mercantile Company plays in the trial; (7) the officers of the court and what they do.

2. The results of Mr. Tate's trial. The jury found Mr. Tate guilty and sentenced him to the penitentiary for a term of two years. Mr. Tate accepted the sentence and was taken away in a few days by the sheriff of the county.

The pupils spent several conference periods in discussing what they had observed at the trial and in criticising what they considered unfair methods practiced during the proceeding of the trial. Their discussions dealt with the following points:

1. The responses of the witnesses on the stand.
2. The method of questioning and cross examining witnesses practiced by the attorneys.
3. The final arguments of the attorneys to the jury.
4. The method of selecting the jury.
5. The fairness of the judge in his rulings.
6. The qualifications of the jurors.
7. The instructions of the judge to the jury.
8. The verdict of the jury in light of the evidence and court instructions.
9. The seriousness of the charge against Mr. Tate.

The pupils were unanimous in agreeing that some of the attorneys were unfair to some of the witnesses. They were of the opinion that the attorneys were endeavoring to confuse the witnesses rather than to search for the real truth in the matter.

They thought that one attorney, particularly, tried to bias some members of the jury in making what they considered personal appeals in his final argument. The method of selecting the jury was criticised rather severely by the pupils. They were of the opinion that the jurors should be people competent of passing intelligent judgment upon the evidence and court rulings and that they should be selected in terms of their qualifications for such service. They felt that some of the jurors were not competent to render a judgment based upon the facts in the case and the court instructions. They spent some time discussing the court instructions to the jury, and agreed that they were fair and instructive for the jury. The pupils were, however, unable to reach the same verdict that the jury did. The vote of the pupils, after they had observed and discussed the case, was seven for conviction and four for acquittal. The four pupils who voted for acquittal felt that some of the jurors had been influenced in reaching their verdict or were not competent to render a fair verdict. They all agreed, however, that the jury was the best method for passing upon charges against people, and that considering the seriousness of the charge against Mr. Tate, he received for the most part a fair trial.

3. Associated projects. During the study of Mr. Tate's trial, the following associated projects were suggested by the pupils and selected for later study:

1. What Mr. Tate will do in the penitentiary.
2. How Judge Henson is elected.

The first of these projects is developed in detail on pages 73-77.

4. References used by pupils in this project.

- Hughes — *Community Civics*, p. 319.
 Dunn — *Community and Citizen*, p. 110.
 Field and Nearing — *Community Civics*, p. 88.
 Rader — *Civil Government of Missouri*, p. 226.
 Lapp — *Elements of Civics*, p. 85.
 Allen — *Civics and Health*, p. 117.

Ziegler — *Our Neighborhood*, p. 88.

Doyle — *The Citizen*, p. 89.

Missouri Statutes, vol. II, p. 288.

Hinsdale — *Civil Government*, p. 289.

What Mr. Tate Will Do in the State Penitentiary

1. The visit to Jefferson City. Several plans were suggested by the pupils for obtaining information as to what Mr. Tate would do in the penitentiary. Lee suggested that a study of the references would furnish the desired information; Neva said that she knew some people who had visited our state penitentiary and that she thought she could find out quite a good deal from them; Ralph objected to Lee's suggestion on the ground that he had been attempting to find such information in the reference books, but was unable to find out what people do in the state penitentiary. He suggested that if the group could visit the state penitentiary they would be able to see what people do there. He said that Mr. Tatem, their representative, had told him that the officials of the state penitentiary were glad to take school children through the penitentiary. He also remarked that on this trip they would see Missouri's Capitol Building and the Missouri River, which he had always wanted to see. Ralph's suggestions appealed to the pupils. They discussed the probable cost of the trip,¹ how long it would take to make the visit, and the other things besides the penitentiary that they could see on such a trip. They agreed to postpone any decision until they had discussed the trip with their parents. The next day they reported that their parents would be glad to have them go to Jefferson City. They soon reached a final decision to go.

Three problems now confronted the pupils: (1) when they should start and how long they should be gone; (2) railroad connections; and (3) what they should visit on their trip. In order

¹ Pupils paid the expenses for such trips out of the money earned from projects carried on at home during school vacation.

to answer the first two questions the pupils made a study of a Missouri map for the purpose of finding out the railroads that lead from Goodman to Jefferson City. From this study, they discovered that they would have to travel over two roads — Kansas City Southern and Missouri Pacific. They then telephoned to the agent at Goodman to send them by next mail time-tables for these two roads. The time-tables were received on the next mail, and the pupils proceeded to plan their trip. They agreed to take the Kansas City Southern at Goodman at 9 A.M. Thursday, changing to the Missouri Pacific at Joplin at 11 P.M. the same day, and arriving at Jefferson City the next morning. This would give them six hours to visit various places in Joplin. They planned to spend two days at Jefferson City — one at the state penitentiary and on the Missouri River, the other at Sessions at the State Legislature and in state buildings. Leaving Jefferson City at 11 P.M. Saturday they would arrive next morning in Nevada, at which place they stopped over until 3 P.M. in order to visit the Missouri State Insane Asylum. Leaving Nevada at 3 P.M. they would arrive at Goodman Sunday evening at 10 P.M. The pupils thus planned to spend four days on their trip to Jefferson City and return.

The trip thus planned, the next problem was to map out what they wanted to visit. After a considerable amount of discussion and study the pupils concluded to visit the places listed below. Ralph suggested that Neva take her kodak so that they might get pictures of the different places. Neva consented to do so.

1. The Frisco Shops at Joplin.
2. The Joplin Mining Company.
3. The Missouri State Penitentiary at Jefferson City.
4. The Missouri Capitol Building at Jefferson City.
5. The Missouri Supreme Court Building at Jefferson City.
6. The Governor's mansion.
7. Sessions of the Missouri State Legislature.
8. The Missouri River and a river boat.
9. The Missouri State Insane Asylum at Nevada.

2. The result of the visit to Jefferson City. The trip was carried out as planned by the pupils. It was a decided success from every point of view. At Joplin the pupils visited the big machine shops of the Frisco and went down into one of the big mines of the Joplin Mining Company. They attended sessions of the Missouri Legislature and listened to several speeches on the County Unit (school) Law, and they visited the Governor's mansion at which place they had an opportunity to meet Governor Hyde. At the penitentiary the pupils met Mr. Tate and observed his work at the men's shirt factory; saw hundreds of cells, observing prisoners at work making various things; visited the prison school and many other interesting things connected with the penitentiary. They had an opportunity to see the Missouri Supreme Court in session and visited various rooms connected with the Supreme Court Building. At the Capitol Building the pupils visited the state offices, the Capitol dome, the art and historical rooms, etc. At Nevada they spent several hours going through the big insane asylum at that place. They went for a boat ride on the Missouri River. Kodak pictures were taken of various places.

Several conference periods were devoted to a discussion of the things that they had observed on their trip, such as: management, work, and treatment of prisoners in the penitentiary; what Governor Hyde does; commerce on the Missouri River; various items about the sessions of the State Legislature; the new Capitol Building; various historical stories connected with Jefferson City; historical relics observed in the Capitol Building, etc. The pupils made a folder, entitled "Our Trip to Jefferson City" in which they gave pictures of the various things seen, short stories of their experiences, etc. This folder was put in the school library for general school use.

3. An account of the trip to Jefferson City. Many of the school children of the other groups as well as the parents were interested in what the pupils of this group had seen on their trip to Jefferson City. In order to give an account of their trip, the pupils decided

that the best way would be to prepare a program as they had done on other occasions, presenting what they considered the most interesting things that they had experienced on their trip. After considerable discussion the pupils decided on the following program for a night community meeting. Programs were prepared by the pupils and sent to each home of the community inviting the parents and children to attend.

COMMUNITY MEETING PROGRAM

Wednesday Evening at 7 P. M. February 25, 1921

AN ACCOUNT OF OUR TRIP TO JEFFERSON CITY

1. Community Singing
2. What I Saw at the Joplin Mining Company and the Frisco Shops (Lee)
3. My Experiences at the State Penitentiary (Edith)
4. What I Saw on My Visit to Governor Hyde (Neva)
5. What They Are Doing in the Missouri Legislature (Gladys)
6. My Boat Ride on the Missouri River (Rebecca)
7. The Capitol and Supreme Court Buildings (Ralph)
8. What I Saw at Nevada (Jewell)
9. Refreshments

WE SHALL BE DELIGHTED TO SEE YOU AT THIS MEETING

UNDER AUSPICES OF THIRD GROUP

EXPERIMENTAL SCHOOL

4. Associated projects. During the visit to Jefferson City and in the discussion of various things seen on this trip, the following associated projects were suggested and selected by the pupils for later study:

1. Why was the Missouri Capitol Building located on the Missouri River?
2. How far down the Missouri River can one go on a boat?
3. How are people admitted to the Missouri Insane Asylum at Nevada?

4. What use is made of the Joplin ore?
5. What steps will the County Unit Bill (school) have to pass before it becomes a law?

5. References used by pupils in this project.

Pupils purchased various guide books at Jefferson City which they used in a study of places visited.

The Missouri Blue Book (report of various state institutions).
Time-tables for the Kansas City Southern and Missouri Pacific Railroads.

Map of Missouri.

Rader — *Civil Government of Missouri*, chaps. VII and VIII.

Vile — *Civil Government of Missouri*, chaps. XII and XIII.

Musick — *Stories of Missouri*, chaps. X and XI.

Rader — *History of Missouri*, chaps. X and XII.

Loeb — *Civil Government of Missouri*, chaps. VIII and IX.

Joplin Mining Company literature.

Frisco Railroad advertising literature.

Copy of County Unit Bill.

Lantern Slides: "Missouri's State Institutions."

How the League of Nations Will Benefit the World as Mr. Cox Sees It

1. Deciding to visit Joplin to hear Mr. Cox. During the fall of 1920, the League of Nations was the current topic of discussion in the home, in the church yard, in the store, at the mail box corner, at public gatherings, and in the schoolroom of the Experimental School community. The people were pretty well divided upon this momentous problem. Many regarded it as merely a partisan issue; others conscientiously believed that the League of Nations would either involve the United States in continuous wars, or make for the brotherhood of man. As the time for the November election approached, the discussion grew more intense until it finally invaded the schoolroom. Children, especially the older

ones, held different points of view regarding this problem, largely at first as a result of the opinions of their parents. Some vowed that if our country joined the League of Nations it meant more European wars; others defended the League of Nations as the preventer of such wars. Day after day questions about some phase of this current topic would bob up in the conference periods, until finally the League of Nations issue became the center of discussion at the school, as it had been for some time in the local store or at the mail box corner.

To further accentuate the issue, the *Joplin Daily Globe* appeared one afternoon with large headlines announcing "Cox Coming to Joplin to Discuss the League of Nations." The paper pointed out in detail how Governor Cox would explain the League of Nations to the satisfaction of the voters; that he would show how it would prevent future wars and promote economic prosperity. At the first meeting of the group, Jewell, a hot defender of the League of Nations, stated that she was going to hear Mr. Cox discuss the League issue. She said that her father and mother had told her that morning that they were going and that she could go too. She remarked that they would have room in their Ford for two other girls if anyone wanted to go. Ralph ironically remarked that Cox would argue for the League just like old man Dee. He said that he couldn't understand why the Democrats were bent on disregarding Washington's advice regarding "entangling alliances." Lee stated that he had heard Mr. Jones say that England would have five votes to our one in the League and that she would run the thing to suit herself. Jewell sarcastically remarked that Mr. Jones didn't know what he was talking about. She said that she had read in the *Joplin Globe* that it took a unanimous vote of the League members to decide the big issues relating to the countries of the world. She wanted to know of Lee what he thought about that. Lee bombastically replied that he didn't believe it. He thought that was some of old man Dee's argument. Jewell proceeded to hunt up the paper that had the article to convince Lee that she was right and that she did not

get her information from old man Dee. Neva remarked that her father was against the League but her mother was for it. She thought that Wilson's advice was better than Washington's since she felt that he knew more about present day problems as they relate to international relationships. Lee remarked, on the side, that he guessed that Neva's mother was another Democrat. Neva replied curtly, "Yes she is, and I am too." Rhoda stated that she surely would like to see Mr. Cox and hear him discuss the League of Nations, as she felt that most of them didn't know what they were arguing about. She was of the opinion that her parents would go since her father was one of the County Democrat Central Committeemen.

The teacher at this point said that she would like to hear Mr. Cox discuss the League of Nations as there were many points currently discussed that she did not understand. She thought that it certainly would be a fine thing if the pupils could arrange to make the trip to Joplin, as she felt that they should study both sides of this momentous issue before reaching a final conclusion. Neva agreed with the teacher that they should hear both sides of the League issue before reaching a final decision as to whether it would or would not benefit the world. She said that she had heard her father say not long ago that Mr. Roosevelt would speak at Neosho some time before the November election, and then they would have an opportunity to hear the other side of the issue since all Republicans that she had heard talk were strongly opposed to the United States becoming a member of the League of Nations. The teacher remarked that she thought that these meetings would afford the pupils opportunity to get first hand information on both sides of the League issue, and that she would like to suggest that each pupil discuss the proposed trip with his or her parents and report on the next day whether they wished to hear Mr. Cox discuss the League of Nations and if it would be possible for them to make the trip.

On the next day, Jewell reported that she was going with her father and mother to Joplin to hear Mr. Cox; Rhoda stated that

she also was going with her parents; Ralph said that his parents were going and that he could go if he wanted to do so; Lee stated that he had changed his mind a little about Cox, and that he would like to go but had no way to make the trip. Neva thought that they would have room in their Ford for one more and jokingly remarked that Lee could go with them and sit in the front seat with her father as he was a good Republican. In similar fashion all the pupils stated either that they would like to go if they had a way or that they were going with their parents. As a result of the discussion, the group decided to visit Joplin on October 15 to hear Mr. Cox discuss the League of Nations.

2. Planning the trip to Joplin. Two problems now confronted the boys and girls: (1) transportation to Joplin, and (2) issues that they would like to hear Mr. Cox discuss. The first problem was easily solved since many of the parents of the children planned to attend the political speaking. Jewell agreed to take May and Gladys; Rhoda invited Audrey to go with her; Neva had room for Lee; Ralph decided to go with his parents; and the teacher agreed to take Gladys, Edith, Rebecca, and Minnie with her. They decided that they could make the trip in about one hour and that all should meet at the school building at nine o'clock on the morning of the speaking.

The second problem proved more perplexing. Ralph said that he would like to hear Mr. Cox explain Washington's advice regarding "entangling alliances." Lee wanted him to explain why England has five votes to our one in the League. Jewell said that she would like to have him explain Article X, as she had heard so much said about this article involving the United States in continuous wars. Audrey wanted him to show how the League could prevent future wars. Gladys said that her father would like him to explain how the League would increase the price of his hogs and wheat. The teacher thought that she would like to have Mr. Cox explain the Lodge Reservations. Out of this discussion the pupils agreed to pay particular notice to Mr. Cox's discussion of any of the following issues:

1. Washington's advice regarding "entangling alliances."
2. Article X.
3. The Monroe Doctrine and the League of Nations.
4. How the League will prevent future wars.
5. How the League will promote economic prosperity.
6. Why England has five votes to our one in the League Assembly.
7. The Lodge Reservations.
8. How the League will reduce war armament.

In order that they might acquaint themselves further with the League of Nations, the pupils decided to write to the following sources for literature dealing with both sides of the League issue which they could study and discuss during the time preceding Mr. Cox's speech at Joplin:

1. Mr. A. W. Noel, Chairman County Democrat Central Committee, Pineville, Missouri, for copies of the Covenant of the League of Nations and literature advocating the entry of the United States into the League.
2. Mr. John Taylor, Chairman Republican County Central Committee, Pineville, Missouri, for literature dealing with reasons why the United States should not join the League of Nations.

3. Results of Mr. Cox's speech. The trip to Joplin was carried out exactly as planned by the boys and girls. It was a most interesting event for them, since this was the first time they had attended such a large political meeting. They heard Governor Cox, Mr. Atkenson, candidate for Governor, and Mr. Long, candidate for United States Senator, discuss many phases of the League of Nations issue. They came back home with Cox badges and much literature on the League of Nations.

Several conference periods were used by the pupils in discussing various phases of the League of Nations as they had heard them discussed at the Joplin meeting. Ralph said that since he had heard Mr. Cox and had studied the literature on the subject, he had changed his mind regarding Washington's advice in his

Farewell Address. He thought that world conditions had so changed since Washington's time that it was now necessary for the United States to join the other countries of the world in some sort of an association in order that all nations might conjointly discuss solutions to problems that vitally interest all peoples. He carefully pointed out in this connection how European wars would now eventually involve us in war through our commercial relationships as did the recent World War. Neva stated that she believed that if the League of Nations had been in existence previous to 1914, that the late World War would not have been fought. She thought Mr. Cox brought out that point very clearly.

Lee grudgingly admitted that he was wrong about England's running the League with her five votes to our one. He said that he believed in the principle of representation of peoples, explained by Mr. Cox, and thought that Canada should certainly have representation in the League Assembly. Jewell pointed out very carefully in this connection the similarity of the League Assembly to our own House of Representatives. She thought that it would be a serious error for the League to deny such countries as Canada representation. Lee agreed with Jewell and further pointed out the fact that the failure of King George III to allow the American Colonies representation in Parliament was the primary cause of our American Revolution. He thought that Mr. Cox's explanation of the similarity of the League Assembly to our House of Representatives was the best part of his speech.

Ralph stated that he still favored the Lodge Reservation to Article X since it made it absolutely clear that no war could be declared without the consent of our Congress. Jewell said that she could see no harm in such a reservation and was inclined to favor it on the ground of Ralph's argument. Rhoda thought that the Lodge Reservation to Article X summed up nicely Mr. Cox's interpretation of the meaning of this article and she, like Jewell, was inclined to favor it on the ground that it made it impossible for any war to be declared without the consent of our people through Congress. She said, however, that she could find

no argument worth considering for such Reservations as the Monroe Doctrine, equal membership of the United States with England in the League Assembly, etc. Minnie thought that the Reservation providing for equal membership in the League Assembly was founded upon prejudice and was in violation of the principle of representation of peoples so well explained by Mr. Cox. She carefully pointed out that decision on all big issues demanded unanimous consent of the League Council and that the United States would have as many votes in this Council as any other country.

Audrey thought that Mr. Cox's explanation of how the League would promote, as he called it, "economic prosperity," was convincing. She pointed out that we now depend upon other nations of the world for a market for some of our products just as other nations depend upon us to purchase some of their products. She illustrated this fact by pointing out how our trade relationships were vitally affected by the recent war. She believed that the League of Nations would promote better trade relationships among the countries of the world since it afforded opportunity for international discussion of economic problems.

May said she got more out of Mr. Cox's explanation of how the League would reduce armament. She stated that she was convinced that if the nations would stop building battleships and recruiting large armies, wars would be impossible. Ralph agreed with May's argument and in addition explained an article that he had read in the *Literary Digest* dealing with the relative size of armaments of the various nations of the world. He illustrated by means of graphs the relative size of the navies and armies of the countries of the world and made the point that the big armies of Germany were undoubtedly the cause of the recent World War. In like fashion the pupils spent some time discussing the following issues connected with the League of Nations, in light of their readings and Mr. Cox's speech:

1. Countries members of the League of Nations — size, population, etc.
2. How the League may prevent future wars.

3. Why England has five votes to our one in the League Assembly.
4. How the League may reduce armaments.
5. The Covenant of the League of Nations with special reference to Article X.
6. The Lodge Reservations.
7. Washington's advice regarding "entangling alliances."
8. The Monroe Doctrine and the League of Nations.
9. How the League of Nations may promote better economic relationships.
10. Why the United States should join the League of Nations.

They agreed to postpone final decision on these issues until they had heard Theodore Roosevelt, Jr., explain the other side at the Neosho meeting.

4. Associated projects. During the process of working out the League of Nations project the following associated projects were suggested and selected by the pupils for later study:

1. Why the United States should not become a member of the present League of Nations as explained by Theodore Roosevelt and others at the Neosho meeting.
2. Why the League of Nations became a political issue.
3. Why the United States entered the World War.

5. References used by pupils in this project.

Copies of the Covenant of the League of Nations.

Literature dealing with reasons why the United States should become a member of the League of Nations.

Literature dealing with reasons why the United States should not become a member of the present League of Nations.

Brigham and McFarland — *Advanced Geography*, chaps. V, VI, VII, and VIII.

Mace — *A School History of the United States*, p. 121.

Bourne and Benton — *History of the United States*, p. 145.

Mussey — *American History*, chap. XXII.

Literary Digest.

Joplin Daily Globe.

Maps of the World.

Washington's Farewell Address.

6. League of Nations Community Meeting. After the boys and girls had heard, read, and discussed fully both sides of the League of Nations issue, they decided to prepare a program for

COMMUNITY MEETING PROGRAM

At the Experimental School

Wednesday Evening at 7

THE LEAGUE OF NATIONS AS WE SEE IT

I. THE ISSUES

1. Community Singing and Phonograph Music
2. Covenant of the League of Nations with Special Reference to Article X (Jewell)
3. Washington's Advice Regarding "Entangling Alliances" and the League of Nations (Ralph)
4. How the League of Nations May Prevent Wars (Neva)
5. The Lodge Reservations — What They Are and How They Affect the League of Nations (Minnie)
6. An Illustrative Chart Showing the Present Armies and Navies of the World and How the League of Nations May Reduce Them (Audrey)
7. Why England Has Five Votes to Our One in the League Assembly (Lee)
8. How the League of Nations May Promote Economic Relationships (Rhoda)

II. THE POINTS OF VIEW SUMMARIZED

1. An Evaluation of the Points Favoring the United States Entering the League of Nations (May)
2. An Evaluation of the Points Justifying the United States Remaining Out of the League of Nations (Gladys)

PHONOGRAPH MUSIC AND REFRESHMENTS

WE SHALL BE GLAD TO SEE YOU AT THIS MEETING

UNDER DIRECTION OF THIRD GROUP

EXPERIMENTAL SCHOOL

one of the night community meetings setting forth their views as a result of their study of this momentous problem. The program on the preceding page is an exact copy of the program given by the boys and girls of this group at the night community meeting. Invitations were prepared by the pupils and sent to all of the parents of the community and to the teachers of the adjoining schools. The meeting was attended by practically all of the parents of the Experimental School and many from the adjoining schools.

Other Projects

In similar fashion the following projects were selected and worked out by the pupils of this group during the four years that the Experimental School was in operation:

1. How our school election is conducted.
2. How our taxes are collected at Pineville.
3. How our road boss is appointed by the County Court.
4. What our taxes are used for at Pineville.
5. How Mr. Smith cares for the prisoners in the County Jail.
6. Why the county democratic candidates believe that they should be elected as explained by them at the Bethpage Political Meeting.
7. Why the county republican candidates believe that they should be elected as explained by them at the Cross Roads Political Meeting.
8. What our county officers do at Pineville.
9. How the Ed. Hass Wholesale Grocery Company at Neosho supplies Mr. Williams' groceries.
10. How our new school furnace was made at Granby.
11. How the Neosho Creamery makes butter.
12. How sick people are cared for in the Pittsburg Hospital.
13. How men's shirts are made at the Joplin Shirt Factory.
14. How our wagons are made at the Neosho Factory.
15. How the McDonald County Bank handles our money.
16. How Mr. Taylor surveys Mr. Edmonds' farm.
17. How the *Joplin Daily Globe* is printed.
18. How the Joplin Opera Company will present "Shepherd of the Hills."

19. How electricity is made at the (local) Noel Electric Plant.
20. How ice is manufactured at the Noel Electric Plant.
21. How Armistice Day will be celebrated at Pineville.
22. What boys do in the Missouri Reform School.
23. How fish are hatched at the Neosho Fish Hatchery.
24. Why so many people go to the Bella Vista Resort in Arkansas.
25. How the people of our community vote at the general November election at the Bethpage Polling Place.
26. What Armour and Co. do with our fat hogs.
27. How the Red Cross is helping win the war as explained by Mr. Noel, County Chairman Red Cross Drive, at the Bethpage meeting.
28. Why we should buy Liberty Bonds as explained by Congressman Decker at the McNatt meeting.
29. How the Weather Bureau at Joplin predicts weather conditions published in the *Joplin Daily Globe*.
30. What we will see at the Missouri State Fair at Sedalia.
31. What the Fairview Elevator Company does with our wheat.
32. What we will see at the big circus at Neosho.

III. HAND PROJECTS

I. The Projects of the First Group

Making an Ironing Board

1. Selecting the project. Jim remarked one day to his teacher that his mother had no ironing board. He wanted to know if she thought it would be possible for him to make one for her like the ironing board that Ralph had made for the school. He thought that it would be no more difficult to make than the washing bench that he had just finished. The teacher said that she thought the ironing board would be a very useful article for his mother and she was of the opinion that he could make it. She advised him, however, to first study the project in Blackburn's *Problems in Farm Woodwork*, noting particularly the design, specifications, materials, and plan before deciding definitely about the matter.

After he had more fully considered these points she would be glad to further discuss the project with him. Jim took one of the Blackburn books home with him and reported to the teacher next day that he felt sure that he could make the ironing board as described in the book. He said that he had talked the matter over with his mother who said she would like very much to have one of the ironing boards. The teacher stated that she would be very glad to assist him in making the ironing board and that at the next conference she would have time to discuss plans with him. She advised him in the meantime to be thinking over the kind and amount of materials needed, tools and processes, and method for making the ironing board. She suggested that he study carefully Blackburn's suggestions, the school ironing board, and if possible talk over the plans with Ralph who had been very successful in making the school ironing board.

2. Planning the project. At the next conference Jim and the teacher discussed plans for making his ironing board. They decided that the problems that should be considered first were: (1) kind and amount of materials; (2) tools and processes; and (3) method for making the ironing board. Jim stated that Mr. Edmonds was going to Rocky Comfort on the next day and that he could have him get the materials, but he was not sure just what materials he would need. The teacher suggested that he make out a bill showing the kind and amount of lumber needed. She said that she thought there were enough screws, nails, and wood stain left over from making the school ironing board so that he would not have to include these in his bill. She told him that she would be glad to assist him should he need help. Jim agreed with the teacher that it would be impossible for Mr. Edmonds to get the right kind of lumber without such a bill. He immediately began work on his bill of lumber, studying the specifications in Blackburn and measuring various parts of the school ironing board. After spending some time calculating the lumber needed, Jim submitted his bill to the teacher for criticism and after checking it with her he made out a second incorporating her suggestions.

MY PROJECT PLAN

1. Name: Ironing Board

2. Apparatus: Handsaw, smoothing plane, hammer, screw driver, square, brace and one $\frac{3}{4}$ inch bit.

3. Materials: 1- 1' x 18' x 5 feet
4- 1' x 2' x 6 feet
2- 2' x 2' x 18 inches
3- 1' x 2' x 18 inches
3- 1' round 18 inches

7. Method: First saw, plane, and sandpaper lumber per the specifications of the materials. Second, make top board, legs, and cleats according to the instructions in Blackburn's Problems in Woodwork. Third, assemble parts and test according to Blackburn. Fourth, make any changes that are needed.

This bill was approved by the teacher and was used by Mr. Edmonds in purchasing the lumber.

PINE LUMBER BILL

1-1" x 20" x 6 feet

1-1" x 4" x 8 feet

1-2" x 2" x 6 feet

1-1" round x 6 feet

The material disposed of, the next problems considered were the tools and processes involved in making the ironing board. Jim stated that he was familiar with all of the tools needed, since he had used them in making other projects. He said that he did not quite understand how the mortise joints were made, how to countersink screws, and how to mark off the triangular form of the top board. After clearing up these difficulties, the lumber specifications were discussed. The number, length, width, shape, and finishing of the various parts were considered. At this point Jim stated that he believed that he could now make out his plan. The teacher remarked that she felt that he understood the main problems involved and that she would be glad to check the plan as soon as he could submit it. Jim spent the rest of the period working on his plan. At the next conference period he submitted to the teacher a list of the tools needed and number, size, and shape of the different pieces of lumber, and a written plan for making the ironing board. In checking over his plan, the teacher suggested several minor changes, such as mistakes in spelling, punctuation, abbreviations, lumber specifications, etc. A second plan was then made incorporating the suggested changes. This was approved by the teacher and was used by Jim in constructing his ironing board. The plan as worked out by Jim and approved by his teacher is shown on the opposite page.

3. Executing the plan. After finishing the plan, Jim proceeded to make the ironing board. He first selected the tools that he needed; placed the lumber on the work trestles; and marked

out the various pieces. The various pieces were then sawed out, planed, sandpapered, varnished, and assembled in accordance with the plan worked out. In constructing the ironing board, Jim followed his plan as worked out, consulting the teacher or other pupils only at those points that gave him trouble in execution.

4. Criticising the finished project. In discussing and demonstrating the finished ironing board, Ralph called Jim's attention to the fact that the legs would not fold up closely as called for by the plan. He pointed out to Jim that the ironing board should fold up like one piece so that it could be placed out of the way when not in use. Upon measuring the length of the rounds, Jim discovered that the end round of the inner pair of legs was too long. He found that he had made an error of one-half of an inch as compared with the specification in the plan. As the round had been glued firmly in the mortised joint, Jim was puzzled as to how he could remove it in order to shorten it one-half of an inch. He consulted the teacher. She measured the end round of both the inner and outer pairs of legs and found that Jim's conclusion was correct; that is, he had made an error in measuring the length of the inner round. Jim remarked that the only way that he could figure out to remedy it would be to heat the glue with the blow torch so the round could be removed. The teacher immediately stated that the fire of the torch would burn the legs which would mar their appearance. Ralph suggested that it might be possible to saw one end of the round next to the leg and remove the mortise portion with the auger bit. Jim thought that would solve the difficulty, but upon measuring the amount of the round that would thus be sawed off he discovered that it would make it one-fourth of an inch too short. He said that it seemed to him that the only way out of the difficulty would be to remove the round and make a new one. He thought that Ralph's suggestion would be the best way for removing it. The teacher remarked that she believed that Jim was right as she could think of no other way. Jim proceeded to remove the old round and put in a new one. His ironing board then worked beautifully and was considered



JIM HAS JUST FINISHED HIS IRONING BOARD

by the teacher and other pupils as good as the one Ralph had made for the school. Jim remarked, on the side, to Ralph: "I'll bet you next time I'll measure my lumber carefully." The teacher overhearing this remark said that it was always wise to be very exact in carrying out any plans and that she was sure that Jim would not repeat his error.

5. Associated projects. In constructing the ironing board, the following projects were suggested to Jim and written by him on the Project Bulletin Board for later consideration.

1. How does an electric iron work?
2. What is the price of Mr. Williams' ironing boards?

6. References used by Jim.

Blackburn — *Problems in Farm Woodwork*, p. 61.

Rouel — *Woodwork for Schools*, p. 43.

Other Projects

In similar fashion the following projects were selected and worked out by the pupils of this group during the four years that the Experimental School was in operation, practically all of the projects being individual projects:

1. Making a school apron.
2. Making a doll dress.
3. Making a doll apron.
4. Washing doll clothes.
5. Ironing doll clothes.
6. Making a kite.
7. Making costumes for grandmother's wedding.
8. Vegetable gardening.
9. Making a doll rocker.
10. Making a doll bedstead.
11. Making a doll rug.
12. Making doll bedding.
13. Making doll stockings.
14. Making a school towel.
15. Making a doll house.
16. Making a game folder.

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17. Making a flower folder.
18. Making a bird folder.
19. Making a kodak folder.
20. Making a bird house.
21. Making a rabbit trap.
22. Making a snow sled.
23. Making a wagon.
24. Making a cart.
25. Washing school towels.
26. Ironing school towels.
27. Cleaning school grounds.
28. Setting flowers out on school grounds.
29. Setting flowers out in home yard.
30. Growing house flowers at school.
31. Growing house flowers at home.
32. Brushing the teeth at school.
33. Brushing the teeth at home.
34. Washing the hands before eating luncheon at school.
35. Washing the face before eating luncheon at school.
36. Making a squirrel cage.
37. Making a school handkerchief.
38. Making a school napkin.
39. Making a coat hanger.
40. Making a bookrack.
41. Making a pencil box.
42. Making cocoa for school luncheon.
43. Baking apples for school luncheon.
44. Baking Irish potatoes for school luncheon.
45. Making potato soup for school luncheon.
46. Washing school dishes and cooking utensils.
47. Cleaning school furniture.
48. Making vegetable soup for school luncheon.
49. Making bean soup for school luncheon.
50. Making bread pudding for school luncheon.
51. Making a food chart for home and school.
52. Washing and ironing the school napkins.
53. Washing and ironing school towels.
54. Making potato chowder for school luncheon.

55. Making molasses cookies for group party.
56. Making ice cream for group party.
57. Popping corn for school party.
58. Making lemonade for group party.
59. Making grape juice for group party.
60. Canning tomatoes by cold-pack method.
61. Making cornmeal mush for group party.
62. Making cream of tomato soup for school luncheon.
63. Gathering walnuts.
64. Gathering chinquapins.
65. Mending shoes.
66. Patching clothing.
67. Making flower boxes.
68. Testing seed corn.
69. Making fly swatters.
70. Making a fly trap.
71. Making doll dishes from clay.
72. Making a sewing bag.
73. Making valentines.
74. Making costumes for jolly old Santa Claus.
75. Decorating Easter eggs.
76. Making a doll hammock.
77. Making a doll stocking cap.
78. Making reed baskets.
79. Making a necktie holder.
80. Making a checker board.
81. Making a Fox and Geese board.
82. Making a chest for doll clothes.
83. Making doilies.
84. Mowing the school lawn grass.
85. Beautifying schoolroom interior for holidays.
86. Chicken project.¹
87. Popcorn project.¹
88. Potato project.¹
89. Peanut project.¹
90. Cantaloupe project.¹
91. Pig project.¹

¹ Projects carried on at home by pupils under the direction of the school

2. The Projects of the Second Group

Making Cocoa for the School Luncheon

1. **Selecting cocoa for the school luncheon.** In discussing in conference one day possible projects to work out, George stated that Mr. Williams (local merchant) had given him that morning a sample package of cocoa and requested that he try it out at school. He wanted to know if it would be possible to prepare and serve cocoa in school, since Mr. Williams had told him that he would be glad to give the school more of the sample packages should they need more. Letha wanted to know whether cocoa was a wholesome food. She thought that it was something like coffee and was of the opinion that children should not drink it. Grace remarked that she had read in one of her books that cocoa was a wholesome food since it contained milk and sugar. She thought, however, that it would certainly be too expensive to serve to all of the pupils of the school. She inquired of George if he knew how much a cup of cocoa would cost. George replied that he was sure that it was not very expensive since Mr. Williams was giving packages to everybody that came into his store and had offered to give him more should they need them. He was of the opinion that the pupils could bring the milk and sugar from home and that they could serve cocoa to all of the pupils without any extra cost to them. He said what he would like to know was whether it would be possible for them to prepare cocoa at school.

After discussing these and other questions at some length the teacher suggested that it seemed to her that it would be best to find out more about the questions raised and then they might be able to decide at the next conference whether it would be possible to serve cocoa to the pupils. The questions which the pupils finally agreed that they should find out more about were: (1) Is cocoa a wholesome food? (2) Is cocoa an expensive food? (3) Can cocoa be prepared in school?

At the next conference Bessie read out of one of the reference



SERVING COCOA AT THE SCHOOL LUNCHEON

books about cocoa. The book stated that it was a wholesome food, consisting of milk, sugar, water, and cocoa and recommended that people use it instead of coffee. It also emphasized the fact that milk and sugar, which were parts of the cocoa, were fundamental food values. Grace said that her mother had told her that cocoa was one of the best liquid foods outside of sweet milk and that many people used it in their homes. Onal remarked that cocoa was inexpensive. He said that Mr. Williams told him that one of the large packages cost only ten cents. He thought that the pupils could bring the necessary sugar and milk from home and since Mr. Williams had agreed to give them more samples, it would be possible for them to serve cocoa to all of the pupils without any extra cost to them whatever. Lucile was of the opinion that it would be possible for them to prepare cocoa in school. She said that she had found a receipt in one of the cooking books and that she considered cocoa easier to prepare than the bean soup that they had served a few days before. She added that they had all of the equipment required by the receipt for making cocoa, and that she, for one, would like to prepare cocoa since she had never had an opportunity to drink any herself. Out of this discussion the pupils finally agreed that cocoa was an inexpensive, wholesome food, and that it would be possible for them to prepare it in school.

2. Planning cocoa for the school luncheon. At this point, the teacher wanted to know what things should be considered in making cocoa. She thought that it was necessary for them to have in mind the essential points before attempting to make the cocoa. George agreed with the teacher and pointed out that they had failed one time in making potato soup because they had overlooked determining the exact amount of milk needed. He said that one of the points they would have to know about was the amount of the different kind of materials needed to serve all of the pupils and that he was somewhat puzzled as to how they could go about estimating the materials. Letha thought that they could do as they had done in making bean soup, that is, they could

estimate how many pupils the receipt in the book would serve and from this they could estimate the amount of materials necessary to serve all of the pupils. George agreed with Letha's suggestion as a possible method for estimating the materials. The teacher remarked that she could think of no better method than the one suggested by Letha. Grace thought that one of the essential points in making cocoa was to find out how to make it. She said that she had no idea whatever as to how it should be made and didn't understand the recipe for it that Lucile had read. Alfred remarked that it would be necessary for them to know what equipment to use. He wanted to know if it would be necessary to use a coffee pot.

At this point, the teacher wanted to know if it would not be best for them to make a study of some of the essential points raised in the discussion. She was of the opinion that it would be impossible to prepare the cocoa without having a clear idea of some of the issues that had been raised. She added that it seemed to her that the discussion had been largely about (1) equipment needed for making cocoa; (2) kind and amount of materials; and (3) method for making cocoa. George thought that it would be better for some of the pupils to make a study of how cocoa is made, others estimate the materials needed, etc., than for each pupil to make a study of all the questions. He said that was the method used in making bean soup. Onal stated that it would be impossible for him to make a study of all the issues since he had some work to do on a health survey committee. The teacher agreed with George and remarked that she did not mean to suggest that each pupil study all of the questions raised, but rather that they should have in mind the essential points before attempting to make the cocoa. Alfred suggested that a committee be named by the chairman to study each of the problems suggested by the teacher and report their findings to the group for consideration. Letha endorsed Alfred's suggestion and wanted to know how many favored the committee plan. More than a majority of the pupils voted in favor of authorizing the chairman to appoint the

MY PROJECT PLAN

1. Name: *Cocoa.*

2. Apparatus: *Two boilers, two large spoons,
oil stove, large bowl, thirty-
two serving cups and spoons.*

3. Materials: *14 pints of water.
23 t. cocoa ($\frac{1}{2}$ box)
35 t. sugar.
8 quarts sweet milk.*

4. Method: *Put fourteen pints of water
in boiler and heat to 212°F .
Mix cocoa and sugar in bowl
and add enough boiling water
to make smooth paste. Pour paste
into boiler of hot water and let
simmer for five minutes.
Heat milk in boiler to 212°F ,
and then add to cocoa mixture.
Stir thoroughly and serve.*

committees. Alfred, chairman of the group, proceeded to appoint the following committees on how to make cocoa:

1. *Equipment*: Bessie and Grace.
2. *Materials*: George and Lucile.
3. *Method*: Onal and Letha.

At the next conference the committee reported their findings to the group for consideration. After discussing these reports and making several changes the group approved them and proceeded to make out the plan for preparing cocoa. It was agreed that George should secure the sample packages of cocoa from Mr. Williams. Grace, Alfred, Lucile, Onal, and Bessie each agreed to bring one quart of sweet milk from home. It was thought best to ask each pupil to bring from home one tablespoonful of sugar. The plan on the opposite page is an exact copy of the record made by the pupils in the Hot Lunch Folder.

3. Executing the plan for making cocoa. After having finished the plan for making cocoa, the pupils then assigned parts of the work to different members of the group. Lucile thought that George should be appointed to look after the materials, since he had already seen Mr. Williams regarding the cocoa. Grace suggested Onal and Lucile for cooks. She stated that they had made a careful study of the method for making cocoa and for that reason she felt that they could do this part of the work much better than any one of the other pupils. George said that he would like to suggest Alfred and Bessie for waiters. Lucile stated that she would be glad to wash the dishes if anyone would volunteer to assist her. Grace remarked that she had just as soon wash the dishes as do anything else and agreed to assist Lucile. The pupils approved the following members of the group as responsible for the work assigned in preparing and serving the cocoa:

1. *Cooks*: Onal and Letha.
2. *Materials*: George.
3. *Waiters*: Alfred and Bessie.
4. *Dishwashers*: Lucile and Grace.

The pupils carried out their plans successfully. Thirty-two cups of cocoa were prepared and served to the pupils of the school at the Luncheon Period. At this period (as was the general practice), the teacher and pupils carried on an informal discussion which centered largely around questions about cocoa. Some of these questions suggested and discussed were:

1. Where does Mr. Williams get his cocoa?
2. What is the difference between cocoa and coffee?
3. How is the cocoa powder manufactured?
4. What does cocoa grow on?
5. Why is cocoa recommended as a wholesome food?
6. Should we use cocoa at home instead of coffee?
7. Where does cocoa grow?
8. Why don't we grow cocoa?

4. Associated projects. During the study of making cocoa, the following projects were suggested and selected by the pupils for later study:

1. How is cocoa manufactured?
2. Where and how is cocoa grown?
3. The Cocoa Plant (Stereograph Pictures).
4. Ordering cocoa samples from Walter Brown and Company, Boston.

5. References used by pupils in this project.

- Pickard: *Industrial Work for Girls*, pp. 84-85 (method of mixing ingredients), p. 102 (abbreviations and measures).
 Hamilton: *Standard Arithmetic*, Book III, p. 365 (measures).
 Kinne and Cooley: *Food and Health*, p. 26 (cocoa).
School Lunch Bulletin No. 712, p. 4 (cocoa).
 Ritchie-Caldwell: *Primer of Hygiene*, p. 91 (foods).
 O'Shea and Kellogg: *The Body in Health*, p. 58 (foods).
 Stereograph Pictures: Cocoa Plant.
 Cocoa samples and literature from Walter Brown and Co., Boston.

Other Projects

In similar fashion the following projects were selected and worked out by the pupils of this group during the four years that the Experimental School was in operation, practically all of the projects being individual projects:

1. Making a story index cabinet for the school.
2. Vegetable gardening.
3. Making a nail box.
4. Making a bird house for home.
5. Making a rabbit trap.
6. Making snow sleds.
7. Washing school towels and napkins.
8. Ironing school towels and napkins.
9. Cleaning the school grounds.
10. Setting out flowers on the school grounds.
11. Cleaning home yard.
12. Setting out flowers on home yards.
13. Brushing the teeth after luncheon.
14. Washing the hands before luncheon.
15. Cleaning the school windows.
16. Cleaning and varnishing the school furniture.
17. Making school napkins.
18. Making napkins for home use.
19. Making a pencil rack.
20. Baking apple for school luncheon.
21. Making cider for school luncheon.
22. Stewing peaches for school luncheon.
23. Making creamed potatoes for school luncheon.
24. Making cream of tomato soup for school luncheon.
25. Baking Irish potatoes for school luncheon.
26. Baking sweet potatoes for school luncheon.
27. Making potato soup for school luncheon.
28. Making ice cream for school party.
29. Making vegetable soup for school luncheon.
30. Making dried bean soup for school luncheon.
31. Washing school dishes and cooking utensils.

32. Removing stains from clothing.
33. Pressing clothing.
34. Making cottage cheese for school luncheon.
35. Making potato salad for school luncheon.
36. Making rice pudding for school luncheon.
37. Making griddle cakes for school luncheon.
38. Making ginger snaps for group party.
39. Making lemonade for school party.
40. Making postum for school luncheon.
41. Making pumpkin pie for school luncheon.
42. Making food chart for school and home.
43. Canning tomatoes by cold-pack method.
44. Mending shoes at school.
45. Patching clothing.
46. Making first-aid equipment.
47. Making flower boxes for home and school.
48. Testing seed corn.
49. Making a fly trap.
50. Making fly swatters.
51. Making a sewing bag.
52. Making a laundry bag.
53. Making Valentine cards.
54. Decorating Easter eggs.
55. Making a necktie holder.
56. Making a checker board.
57. Making a Fox and Geese board.
58. Making a towel rack.
59. Making a school bag.
60. Making kites.
61. Testing milk for butter fat.
62. Piano practice.
63. Making a wash bench.
64. Making a chicken feeder.
65. Making a watering trough for chickens.
66. Making a seed corn testing tray.
67. Making a porch swing.
68. Making a clock shelf.
69. Making a step ladder.

70. Making a pig trough.
71. Making a cooking apron.
72. Making a milking stool.
73. Making a clothes-pin bag.
74. Making a dusting cap.
75. Making a school apron.
76. Making a pin cushion.
77. Making a school pennant.
78. Making doilies.
79. Making an embroidery bag.
80. Making costumes for school plays.
81. Making molasses candy.
82. Making school swings.
83. Making teeters.
84. Mowing the school lawn.
85. Beautifying the school interior.
86. Making project folders.
87. Making library table.
88. Chicken project.¹
89. Strawberry project.¹
90. Potato project.¹
91. Cantaloupe project.¹
92. Popcorn project.¹
93. Pig project.¹
94. Making school towels.
95. Making tooth-brush rack.
96. Beautifying the school grounds.
97. Growing house flowers at school.
98. Growing house flowers at home.
99. Vegetable gardening project.¹

3. The Projects of the Third Group

The Community Fair

1. **Selecting the project.** In discussing their trip to the Neosho Harvest Show (an Excursion Project), Neva wanted to know if

¹ Project carried on at home by pupils under direction of the school.

it would be possible for them to prepare a similar event for their school. She said that one of the speakers stated that every community should have an exhibit of its farm products each year. She thought that it would be possible for them to prepare an exhibit, since many of the products that she had observed at the Harvest Show were grown in her community. Ralph remarked that he had seen just as fine corn, pumpkins, apples, potatoes, pigs, etc., in his community as he had seen on exhibit at the Neosho Harvest Show. He agreed with Neva that it would be possible for them to plan such an exhibit. He thought, however, that it would be much smaller since the Harvest Show represented one whole county.

Lee wanted to know if it wouldn't be possible to get the adjoining schools to coöperate with them in preparing the exhibit of products. He thought that if they would participate the exhibit would be much larger and represent a greater variety of products. Jewell said that she could think of no reason why the adjoining schools would not participate since they had heartily coöperated in the Community Play Day. She said that she was in favor of inviting them to take part. Ralph stated that he had read not long ago a Farmers' Bulletin describing a Community Fair. He said that the Bulletin advised each community to prepare a yearly exhibit of its products. He understood the Bulletin to mean that the rural schools of any community should get together and exhibit the work that they were doing and the products that were grown in the community. The teacher remarked that she interpreted the Bulletin as Ralph had stated and that she favored inviting the adjoining schools to participate should they decide to prepare such an exhibit. She felt that these schools would heartily participate in such an event, as they had gladly coöperated in the Community Play Day activities.

Neva said that George (Second Group pupil) had told her about attending a similar event in Kansas. She thought that it might be best to discuss the possibility of preparing an exhibit of community products with the other pupils of the school since they

would necessarily have to participate if they were to make a success of the event. The teacher stated that she believed that the matter should be discussed with the other pupils before deciding definitely since they would be expected to coöperate in preparing the exhibit. The other members of the group thought likewise and after appointing the chairman to present the matter to the pupils they retired to the Reading Room to explain the proposition to them.

Neva explained to the pupils that her group had been considering the possibility of preparing an exhibit of corn, apples, school work, potatoes, etc., and that they had decided that it would be best to discuss the proposition with them before reaching a decision, since all of the pupils of the school would be expected to participate. She wanted to know what they thought about preparing such an exhibit and if they believed that it would be possible to get their parents to take part in the event. George immediately stated that he had taken part in such an exhibit of farm products at a school that he had attended in Kansas some few years ago. He said that three rural schools planned an exhibit of school and farm products and that in addition to the exhibit they had some speaking and demonstrating work. He stated that he was sure that they could plan such an exhibit for their school as more farm products were grown here than in the Kansas community. He remarked that he could bring a very fine exhibit of apples and corn. Alfred said that he would be glad to exhibit his Poland China pig. Lucile stated that she was sure that she could bring a pair of her white Leghorns. Jeff said that Mr. Murphy had some of the biggest pumpkins that he had ever seen and that he would see that some were exhibited. Neva remarked that she would bring her dolls. Carl wanted to know if he could exhibit his new wagon.

The teacher remarked that it seemed to her that there would be no difficulty in preparing a fine exhibit of school and farm products and that such an exhibit would certainly be an interesting affair for the community. She thought that Lee's suggestion of inviting the adjoining schools was an excellent idea and she felt that they

would heartily coöperate in preparing the exhibit. Ralph said that he believed all of the pupils were in favor of preparing an exhibit of school and farm products with the coöperation of the adjoining schools and that he would like Neva to put the proposition to a vote of the pupils. Practically all of the pupils voted enthusiastically in favor of the suggestion and as a consequence it was decided to ask the adjoining schools to coöperate with them in preparing an exhibit of school and farm products.

The teacher at this point suggested that they think over plans for the community exhibit before the next conference when they could report their suggestions. She thought that it would be best for the school as a whole to plan the exhibit, since all of the pupils would be expected to participate. She was of the opinion, however, that it would be best for the Third Group, which had initiated the suggestion, to take the lead in preparing and executing the plans. She suggested that the pupils might be able to get some ideas from "Exhibits and Contests for Boys' and Girls' Clubs" (*Missouri University Bulletin* 18) and the "Community Fair" (*Farmers' Bulletin* 68). She thought that it would be advisable for them to discuss the exhibits with their parents, as she felt that they would be able to get many suggestions from them.

2. Planning the project. At the next conference the teacher stated that she was of the opinion that the group should first discuss the big points involved in preparing the plans. She wanted to know if anyone was ready to offer a suggestion. Ralph immediately stated that he thought that the big point they would have to consider first was the program of activities. He thought that the program should consist of two divisions: School and Farm Exhibits, and Speaking. He said that the Community Fair bulletin that he had read recommended such a division of activities. George stated that he had a third division to suggest, Demonstration Work. He said that the program that he had participated in at the Kansas Fair consisted of (1) School and Farm Exhibits, (2) Speaking, and (3) Demonstrations. The teacher remarked that she would like to add a fourth division,



BOYS BUSILY ENGAGED MAKING THEIR WAGONS, RABBIT TRAPS, TIE RACKS, NAIL BOXES, ETC.

namely, a Community Dinner. She thought that the program would last all day and that it would be necessary for the people to bring their lunch. She was of the opinion that they might as well prepare a community dinner. The four divisions suggested were finally approved by the pupils. Lee then wanted to know what kind of products should be exhibited. He thought that the school and farm products should be listed separately, since many of the parents would likely want to enter exhibits. He inquired of George how the products were listed on the Kansas program. George stated that the school products were listed in one column on the program and the farm products in another. Jim inquired about prizes. He thought that it would be necessary to give some sort of a prize for the best products. Rhoda wondered whom they could secure for the speakers. She thought that it might be possible to get the county superintendent. George said that it would be necessary for them to select some judges. He wanted to know whom they could get. He said that the county agricultural agent acted as judge at the Kansas exhibit. The pupils finally agreed that the following were the outstanding points that they would have to consider in making plans for the Community Fair:

1. Exhibits.
2. Speakers.
3. Date.
4. Judges and Prizes.
5. Dinner.
6. Demonstrations.

Ralph thought that it would be best to appoint a committee to work out suggestions for each of the above problems. He stated that they had found the committee method very effective in working out plans for the Community Play Day. Lee said that he favored Ralph's suggestion on the ground that it would save time, since each committee could report its findings to the group for consideration and approval. He wanted to know how many

avored the chairman appointing such committees. More than a majority approved Ralph's suggestion and as a consequence Neva appointed the following committees:

1. *Exhibits.* Ralph, Lucile, and Neva.
2. *Speakers.* Lee, Grace, and Christene.
3. *Dinner.* Jewell, Alfred, and Virgil.
4. *Prizes and Judges.* May, George, and Allie.
5. *Date for Fair.* Gaye, Letha, and Carl.
6. *Demonstrations.* Audrey, Onal, and Thelma.

At the next conference the committees submitted their reports as follows:

1. Committee on Exhibits

Ralph, representing this committee, recommended that the program consist of the following school and home exhibits:

I. School Exhibits

1. Crochet work.
2. Dressed doll.
3. Bird house.
4. Rabbit trap.
5. Fly trap.
6. Fly swatters.
7. School apron.
8. Wagon.
9. Cart.
10. Nail box.
11. Wash bench.
12. Milking stool.
13. Pencil box.
14. Sewing bag.
15. School dress.
16. School banner.
17. Cooking apron.
18. Towel roller.
19. School handkerchief.

II. Home Exhibits

1. Ten ears of corn.
2. Peck Irish potatoes.
3. Peck sweet potatoes.
4. Pumpkin.
5. Dozen onions.
6. Canned fruits and vegetables.
7. Pair Plymouth chickens.
8. Pair Leghorn chickens.
9. Pair Bantam chickens.
10. Pair ducks.
11. Pair geese.
12. Hog or pig.
13. Dairy cow or calf.
14. Sheep or lamb.
15. Pound of butter.
16. Plate of apples.
17. Jellies.
18. Plate of peaches.
19. Plate of turnips.

2. Committee on Speakers

Lee, representing this committee, recommended the following as available speakers:

1. County Superintendent of Schools.
2. County Farm Agent.

3. Committee on Judges and Prizes

Jewell, representing this committee, recommended the following:

1. That the judges be appointed by teachers of participating schools on day of Fair.
2. That the blue ribbon be used as first prize and the red as second.

4. Committee on Date for Fair

Gaye, representing this committee, recommended the following:

1. That the Community Fair be held on Friday, October 29.

5. Committee on Demonstrations

Audrey, representing this committee, recommended the following demonstrations:

1. Cold Pack Canning — Third Group, Experimental School.
2. Culling Poultry — Second Group, Experimental School.

6. Committee on Dinner

Jewell, representing this committee, recommended the following:

1. Invite the patrons of the community to bring their lunch and prepare a community dinner.

After discussing the committee reports and making several minor changes the group approved them and proceeded to formulate the Community Fair program. On the following page is an exact copy of the program as worked out by the pupils.

COMMUNITY FAIR

Where: Experimental School*When:* Friday, October 20

I. SCHEDULE OF EVENTS

- 9:00 to 10:30 A.M. — Checking in and Listing Exhibits
 10:30 to 12:00 A.M. — Speaking and Singing
 1:00 to 1:30 P.M. — Selecting the Judges
 1:30 to 2:30 P.M. — Judging the Exhibits
 2:30 to 4:00 P.M. — Demonstrations

II. PROGRAM OF ACTIVITIES

I. SCHOOL EXHIBITS

1. Crochet work
2. Dressed doll
3. Bird house
4. Rabbit trap
5. Fly trap
6. Fly swatter
7. School apron
8. Wagon and cart
9. School handkerchief
10. Nail box
11. Towel roller
12. Wash bench
13. Pencil box
14. Sewing bag
15. School banner
16. School dress

III. DEMONSTRATIONS

1. Cold Pack Canning
2. Culling Poultry

II. HOME EXHIBITS

1. Ten ears of corn
2. Peck Irish potatoes
3. Peck sweet potatoes
4. Pumpkin
5. Dozen onions
6. Canned fruits and vegetables
7. Pair Plymouth chickens
8. Pair Leghorn chickens
9. Pair Bantam chickens
10. Pair ducks
11. Pair geese
12. Hog or pig
13. Dairy cow or calf
14. Sheep or goat
15. Pound of butter
16. Plate of apples

IV. SPEAKING AND SINGING

1. Community Singing
2. Address: County Superintendent

V. COMMUNITY DINNER

III. SCHOOLS PARTICIPATING

- | | |
|------------------------|-------------|
| 1. Success | 3. Barlow |
| 2. Cross Roads | 4. Bethpage |
| 5. Experimental School | |

ALL PATRONS ARE INVITED. FARMERS ARE REQUESTED TO BRING
 EXHIBITS. MAKE THIS A BIG DAY FOR YOUR COMMUNITY

In discussing how to manage the various phases of work on Community Fair Day, Audrey stated that she thought that it would be almost necessary to appoint committees to look after the different events. She said, for instance, that it would be necessary to have some one to check, list, and prepare places for the

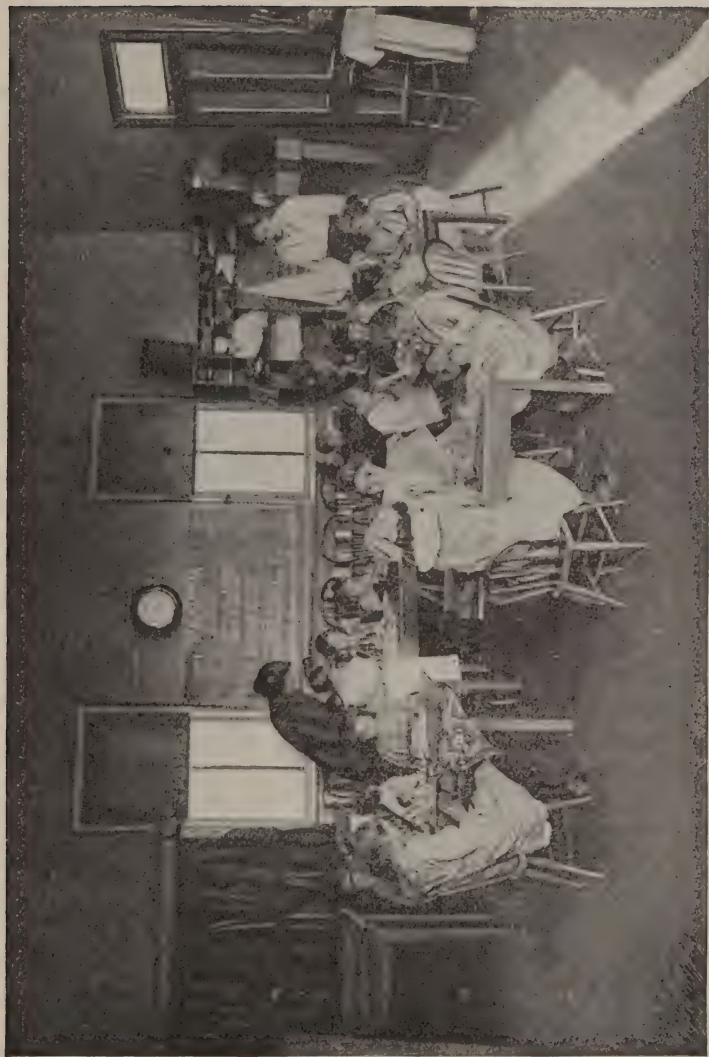
exhibits. Lee thought some one would have to prepare tables for the community dinner. Jewell remarked that it would be necessary to have a committee to manage the decorating of the schoolrooms and the speaking program. The teacher was of the opinion that some one would have to take charge of printing, posting, and sending out programs and posters to the adjoining schools. She thought that the school printing press would come in handy for this work. Ralph said that he couldn't think of a better way for handling the various phases of work on Community Fair Day than the committee method suggested and that he believed the other pupils shared his opinion. He stated that he would like to suggest that the chairman appoint a committee of three — one member from each of the school groups — to have charge of designated phases of the work on Community Fair Day. The pupils readily approved Ralph's suggestion and Neva proceeded to appoint the following committees to have charge, and be responsible for the success, of the work assigned them on Community Fair Day:

1. *Checking, listing, and preparing places for exhibits.*
Ralph, Lucile, and Carl.
2. *Decorating schoolrooms and managing speaking program.*
Lee, Letha, and Neva.
3. *Printing, posting, and sending out programs and posters to adjoining schools.* Jewell, Grace, and Thelma.
4. *Preparing tables for community dinner and caring for food on Community Day.* May, George, and Allie.
5. *Listing prize winners, securing prizes, and assisting judges.* Audrey, Alfred, and Christene.
6. *Meeting the visiting schools on Community Fair Day.*
Teacher, Jeff, and Rhoda.

3. **Executing the plans.** The plans formulated, the pupils proceeded to execute them in every detail. They first printed, posted, and sent out programs and posters to the adjoining schools. Each pupil selected, planned, and made one exhibit or more for

the fair. Farm exhibits of all kinds — corn, potatoes, canned fruits, etc. — were brought from home by the pupils and stored away for the event. The Second and Third Groups prepared to give the Cold Pack Canning and Poultry Culling Demonstrations. The schoolrooms were beautifully decorated and exhibit shelves and tables were prepared for the occasion. All of the adjoining schools — Success, Barlow, Bethpage, and Cross Roads — took part in making the day a success from every point of view. The exhibits were excellent, representing all phases of school and farm products; the speaking and singing seemingly appealed greatly to all those present; the community dinner was sufficient to feed more than two hundred school children and as many parents; the demonstrations were successful and attracted much comment; in short, the fair was without question a very successful event and was greatly enjoyed by all those present.

4. Criticising the project. On the following Monday after the Community Fair the pupils discussed various phases of the work. The pupils expressed themselves as pleased with the way they had carried out their plans. The teacher remarked that everything worked out just as they had planned. She thought the committees executed their parts well and deserved praise for their courtesy and efficiency. She was of the opinion that some things might be improved, but on the whole she considered the fair a big success. Ralph said that, as a member of the committee on exhibits, he believed that they could improve the exhibits by preparing more space for them. He stated that the exhibits should be arranged in sections — one section for school woodwork; another for sewing; another for live stock, etc. Lee thought that the program should begin earlier in the day, as he felt that things were rushed too much. Jewell remarked that she believed that it would be much better to have the speaking program outdoors, since the school building was not large enough to hold the school children, much less the parents. Rhoda was of the opinion that if they should have another fair they should allow more time for getting ready. She thought that the schools should have at least



© GIRLS BUSILY ENGAGED MAKING THEIR DOLL DRESSES, SEWING BAGS, SCHOOL APRONS, ETC.

five weeks to prepare the exhibits and get ready for other things. The teacher remarked that she noticed that the people took much interest in the demonstrations. She thought that if they should have another fair it would be advisable to add more of them. Christene said that her mother told her that it was the best school affair that she had ever attended and that she hoped the pupils would have another one next year. Jeff remarked that his father said that it was the best exhibit of farm products that he had ever seen and that he would give five dollars next year for prizes. The teacher stated that she was glad to know that everybody was pleased and that she was sure that they could have a much better Community Fair next year.

5. Writing an account of the Community Fair. A few days after the Community Fair, the teacher received the following letter from the editor of the *Pineville Democrat*. She read it to the pupils one morning and asked them to think the matter over and offer any suggestions that they might have at the next meeting of the group for replying to the editor.

Pineville, Mo.
October 24, 1920

Mr. Arthur Houser,
Experimental School,
Goodman, Mo., R. A.

Dear Mr. Houser:

I have just had a talk with Mr. Carnell of this place about your Community Fair. He tells me that it was one of the most successful school meetings that he had ever attended. I am writing to know if it would be possible for you to furnish me with an article for the next issue of the *Democrat* telling particularly about your exhibits, community dinner, and demonstrations. It is the policy of the *Democrat* to encourage all worthy educational movements. We believe that your Community Fair is the latest in this line. An article would more than likely stimulate other rural communities along this line another year.

Yours truly

Curtis E. Boren, *Editor*.

At the next conference the pupils discussed ways for writing the article. George stated that the article would be published in the paper and for that reason he felt that the teacher should write it. He was of the opinion that the pupils couldn't write one that would suit the editor. Jeff remarked that he was sure that he couldn't write one, since all of the articles that he had read in the papers were long and used many big words. Ralph wanted to know what the article should include. He thought that it might be rather easy to write one, as there were many things about the Community Fair that could be described. The teacher pointed out that the letter from the editor asked that they tell particularly about the exhibits, community dinner, and demonstrations. Lee thought that something should be written about the speaking program, since he considered it one of the leading parts of the Community Fair. Jewell thought that they could tell about the number of schools present, describe the decorated wagons that the schools came in, tell about the number of children and parents present, and list the school and farm exhibits. Neva wanted to know how long the article should be. She thought that the things that Jewell had mentioned would make a rather long article. After discussing these and other suggestions the pupils agreed that the article should tell about the following:

1. School and Farm Exhibits.
2. Speaking.
3. Community Dinner.
4. Demonstrations.
5. Visiting Schools.

Neva suggested that a committee be appointed to write the article and submit it to the group for consideration and approval. She stated the Second Group had used the committee method in preparing a letter to a Mr. Smith. Lee suggested that each pupil write an article. He thought from all the articles that they would be able to select one that would be suitable to publish. Jewell said that she favored Lee's suggestion. She thought that if the

committee method was used there would be only one article to criticize and it might not meet the approval of the group. Ralph stated that he favored the plan suggested by Lee for the same reason given by Jewell. He suggested that the teacher take a vote of the group on the two methods proposed. The teacher remarked that she was of the opinion that either method would prove satisfactory. She wanted to know how many pupils favored the suggested methods. More than a majority of them favored Lee's suggestion. George wanted to know when the group would consider the articles. Lee stated that he could have his ready by the next conference. The other pupils agreed that they could present their articles at the next meeting of the group. The teacher stated that an article published in the paper would necessarily have to be correct in spelling, punctuation, sentence structure, etc. She advised them to be very careful about these points.

At the next conference the pupils read their articles and discussed each carefully with a view to selecting one for publication. They finally agreed that Ralph's article was the best and recommended it for publication. The following is an exact copy of the article as published in the *Pineville Democrat*:

The Community Fair

Ralph Durham, Experimental School

Despite the rainy weather the Community Fair held at the Experimental School, Friday, October 20, was without doubt, a successful event. Two hundred school children from the Success, Barlow, Bethpage, and Cross Roads Schools joined the children of the Experimental School in preparing an exhibit of school and farm products. The visiting schools came in beautifully decorated wagons.

The morning session was given over to checking in and listing the products in addition to the speaking and community dinner. There was a big display of agricultural products, representing all phases of farming. The school exhibits were fine. The County Superintendent talked on the relation of the School and Modern Community Life. He was followed

by Professor Mitchell of the State Normal School, Pittsburgh, Kansas. Mr. Mitchell's subject was the Modern School. At twelve o'clock a big community dinner was prepared and served to all of the children and parents.

The evening session was devoted to judging the exhibits, demonstrations, and awarding the prizes. In judging the farm products the county agent, who acted as judge, explained the good points of the products to the farmers as he selected the best exhibits. The Experimental School gave two demonstrations. The pupils of the Second Group demonstrated how to cull poultry. The Third Group gave a Cold Pack Canning Demonstration. Prizes were awarded for the following exhibits:

- Canned Corn — Gaye Kelley, Experimental School.
- Canned Tomatoes — Neva Brock, Experimental School.
- Canned Rhubarb — Myrtle Moser, Bethpage School.
- Canned Strawberries — Alta Chase, Barlow School.
- Canned Gooseberries — Lillie Jones, Cross Roads School.
- Cucumber Pickles — Rhoda Collings, Experimental School.
- Chili Sauce — Retha Richardson, Cross Roads School.
- Canned Grapes — Mira Jones, Barlow School.
- Spiced Tomatoes — Gaye Kelley, Experimental School.
- Grape Butter — Alat Chase, Barlow School.
- Grape Conserve — Ollie Carden, Experimental School.
- Canned Sauerkraut — Dora Long, Cross Roads School.
- Blackberry Jam — Retha Long, Cross Roads School.
- Apple Preserves — Jewell Collings, Experimental School.
- Canned Peaches — Katie Linton, Bethpage School.
- Apple Jelly — Annie Moser, Bethpage School.
- Pickled Tomatoes — Cora Richardson, Cross Roads School.
- Pickled Beets — Lorene Moore, Bethpage School.
- School Banner — Experimental School.
- School Handkerchief — Lena Moore, Bethpage School.
- Laundry Bag — Christene Brock, Experimental School.
- School Apron — Ruby Collings, Experimental School.
- Doll Rug — Letha Murphy, Experimental School.
- Crochet Yoke — Edith Linton, Bethpage School.
- Counterpane — Marie Linton, Bethpage School.
- Dressed Doll — Neva Murphy, Experimental School.

- Fly Swatter — Neva Brock, Experimental School.
Butter Paddle — Grace Statler, Experimental School.
Coat Hanger — Floyd Beavers, Barlow School.
Match Striker — Ralph Durham, Experimental School.
Tie Rack — Tom Jones, Success School.
Washing Stool — Jeff Beavers, Experimental School.
Ironing Board — Jim Chase, Experimental School.
Towel Roller — Alfred Price, Experimental School.
Wagon — Kenneth Murphy, Experimental School.
Nail Box — George Moser, Bethpage School.
Fly Trap — Lee Brock, Experimental School.
Turnips — Onal Nun, Barlow School.
Black Twig Apples — Lee Brock, Experimental School.
Champion Apples — John Spiva, Cross Roads School.
Stark Delicious Apples — George Statler, Experimental School.
Ben Davis Apples — Retha Richardson, Cross Roads School.
Popcorn — Rockford Moore, Bethpage School.
Boone County White Corn — Lonnie Collings, Bethpage School.
Reed Yellow Dent Corn — Jessie Richardson, Cross Roads School.
Bluddy Butcher Corn — Jim Chase, Experimental School.
Irish Potatoes — Jessie Richardson, Cross Roads School.
Sweet Potatoes — George Moser, Bethpage School.
Pumpkin — Jeff Beavers, Experimental School.
White Leghorn Chickens — Lucile Guinn, Experimental School.
Plymouth Rock Chickens — Pete Beavers, Barlow School.
Rhode Island Chickens — Felix Thomas, Success School.
Orpington Chickens — Letha Murphy, Experimental School.
Black Langshan Chickens — Cora Linton, Bethpage School.
Bantam Chickens — Jewell Collings, Experimental School.
Leghorn Eggs — Lorene Moore, Bethpage School.
Rhode Island Red Eggs — Felix Thomas, Success School.
Cow Butter — Flossie Moore, Success School.
Poland China Pig — Alfred Price, Experimental School.
Jersey Calf — Jim Chase, Experimental School.
Holstein Calf — George Moser, Bethpage School.
Ducks — Will Chase, Success School.
Geese — May Jones, Barlow School.

Pigeons — Jim Chase, Experimental School.
 Horse Colt — Lloyd Beavers, Barlow School.
 Mule Colt — George Statler, Experimental School.
 Turkeys — Lillie Jones, Success School.

Other Projects

In similar fashion the following projects were selected and worked out by the pupils of this group during the four years that the Experimental School was in operation:

1. Making boys' basket ball suits.
2. Making girls' basket ball suits.
3. Making a school sewing table.
4. Making a school sewing cabinet.
5. Making a school washing sink.
6. Making a school cement walk.
7. Making a cement top for school well.
8. Making a school aquarium.
9. Fencing the school garden.
10. Making a school privy.
11. Making screens for school doors.
12. Making screens for school windows.
13. Making window curtains for school.
14. Making table linen for school.
15. Making a school mail box.
16. Making a school flag pole.
17. Making rubbish cans and covers for school.
18. Making school napkins.
19. Making school towels.
20. Making a dinner pail cabinet for school.
21. Making a basket ball court for school.
22. Making a volley ball court for school.
23. Making a tennis court for school.
24. Making a croquet court for school.
25. Making concrete steps for school.
26. Making a Giant Stride for school.
27. Making a Playground Chute for school.

28. Making a weaving loom.
29. Making a washing bench for school.
30. Making an ironing board for school.
31. Making picture frames for school.
32. Making a nail box.
33. Making snow sleds.
34. Washing school towels and napkins.
35. Ironing school towels and napkins.
36. Cleaning the school grounds.
37. School vegetable gardening.
38. Cleaning home yards.
39. Setting out flowers on school grounds.
40. Setting out flowers on home yards.
41. Washing the hands before school luncheon.
42. Brushing the teeth after school luncheon.
43. Cleaning and varnishing the school furniture.
44. Making napkins for home use.
45. Removing stains from clothing.
46. Pressing clothing.
47. Canning tomatoes by cold-pack method.
48. Mending shoes.
49. Patching clothing.
50. Making first-aid cabinet and equipment.
51. Making flower boxes for home and school.
52. Testing seed corn for farmers.
53. Making a fly trap.
54. Making a clock shelf.
55. Making a fly swatter.
56. Making a sewing bag.
57. Making a towel rack.
58. Testing milk for butter fat.
59. Making cow butter.
60. Making a porch swing.
61. Making a cooking apron.
62. Making a milking stool.
63. Making a dusting cap.
64. Making a school apron.

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65. Making a school dress.
66. Making costumes for school plays.
67. Making project folders.
68. Growing house flowers at school.
69. Growing house flowers at home.
70. Making handkerchiefs.
71. Making a bird cage.
72. Making a library table.
73. Making a bookcase.
74. Making bookracks.
75. Making a paper rack.
76. Making a project bulletin board for school.
77. Printing community meeting programs and posters.
78. Making ventilating devices for school and home.
79. Pasteurizing milk.
80. Testing drinking water for impurities.
81. Piano practice.
82. Baking apples for school luncheon.
83. Stewing apples for school luncheon.
84. Stewing peaches for school luncheon.
85. Making creamed potatoes for school luncheon.
86. Making creamed tomato soup for school luncheon.
87. Baking potatoes for school luncheon.
88. Stewing tomatoes for school luncheon.
89. Making potato soup for school luncheon.
90. Boiling potatoes for school luncheon.
91. Making scalloped potatoes for school luncheon.
92. Making purée of cabbage and potatoes for school luncheon.
93. Making escalloped tomatoes for school luncheon.
94. Making vegetable soup for school luncheon.
95. Making dried bean soup for school luncheon.
96. Making cottage cheese for school luncheon.
97. Making dried bean purée for school luncheon.
98. Making meat soup for school luncheon.
99. Making baked beans for school luncheon.
100. Making egg gruel for school luncheon.
101. Making macaroni soup for school luncheon.
102. Making oatmeal mush for school luncheon.

103. Making bread pudding for school luncheon.
104. Making rice pudding for school luncheon.
105. Making potato salad for school luncheon.
106. Making corn meal mush for school luncheon.
107. Making ginger snaps for group party.
108. Making jelly drop cookies for group party.
109. Making ice cream for group party.
110. Making cider for group party.
111. Chicken project.¹
112. Strawberry project.¹
113. Potato project.¹
114. Corn project.¹
115. Cantaloupe project.¹
116. Pig project.¹
117. Vegetable garden project.¹
118. Making metal polish.
119. The School Orchestra.

IV. PLAY PROJECTS

I. The Projects of the First Group

Indoor Games

1. **Selecting Roly Poly.** Neva suggested one day at the meeting of the group that she would like to play a game of Roly Poly. Carl objected very strenuously to Neva's suggestion on the ground that he preferred to play ball outdoors. Christene wanted to know of Carl if he thought it would be fun playing ball outdoors in the drizzling rain. Other pupils joined in the discussion at this point and it was agreed that an indoor game would be preferable, since it was possible that rain might prevent play outdoors. Fred then suggested that he preferred a game of Tenpins; Ollie said that she always got more fun out of the Bean Bag game. Christene inquired of Neva if she could explain how to play Roly Poly. She said that she had never seen the game played. Neva at this point explained the main points of the Roly Poly game,

¹ Projects carried on at home by pupils under the direction of the school.

such as method of playing and keeping score. Carl suggested, after Neva had finished her explanation, that the pupils take a vote on the three suggested games so that one could be selected, as he desired to play something. Carl's suggestion was approved readily by the other members of the group. Fred then asked Carl to take a vote of the pupils on the three games suggested — Roly Poly, Tenpins, and Bean Bag. Carl accepted, and the result was that a majority of the pupils favored the Roly Poly game.

2. Planning the Roly Poly game. Fred suggested that each side of the Roly Poly triangle be made four feet long. Neva wanted three bowling lines, one six feet from the triangle, another twelve, and the third twenty. She suggested that one be assigned to the first line, two to the second, and three to the third. Carl agreed to the three lines suggested by Neva, but thought that five, ten, and fifteen would be better numerical values to assign to the lines. Christene thought that the size of the triangle suggested by Neva was too large, since it would be rather difficult to hit a Roly Poly if they were placed at such wide intervals. Kenneth explained that he had a new plan for making the score board. After discussing these points at some length, the pupils decided on a three-foot triangle; three bowling lines with the numerical values of one, two, and three respectively; and that each pupil could select any one of these lines from which to bowl at the Roly Polys. They agreed to play individually and in the following order: Carl, Neva, Fred, Christene, Ollie, Kenneth, Gladys, Virgil, Iona, and Onal. The pupils then proceeded to appoint different members to prepare the game according to the plan worked out. Carl made the triangle and placed the eight Roly Polys on it according to the regulations of the game; Fred made the bowling lines and assigned the proper numerical value to each one; Kenneth prepared the score board that he had previously suggested; Coy placed the three balls in the small triangle at the end of the first bowling line.

3. Playing Roly Poly. After the game had been thus arranged, the pupils spent the period in playing. Each one selected the



ROLY POLY AFFORDS BOYS AND GIRLS MUCH REAL FUN

line from which he desired to bowl at the Roly Polys. For instance, Carl selected the third line. Each time that he brought down a Roly Poly he scored three. Neva selected the first line, scoring one each time she succeeded in bringing down a Roly Poly. Pupils quite frequently changed their bowling line during the game which in no way interfered with the progress of the game. Each pupil kept his own score. For example, if Fred succeeded in bringing down two Roly Polys out of his three throws, his score was six, since he had selected the third line. He wrote this score on the score board under his name. Thus, each pupil after playing his turn wrote under his name on the score board the points won.

4. Results of the Roly Poly game. At the end of the game, each pupil added his score in order to find out who had won the game. Carl succeeded in achieving the highest score and was acclaimed the winner of the game. The following is a copy of the scores of the pupils for this game and also shows the form of score board used by the pupils.

ROLY POLY SCORES

CARL	NEVA	FRED	CHRISTENE	OLLIE	KENNETH	GLADYS	VIRGIL	IONA	ONAL
3	1	3	2	4	3	1	2	3	3
6	0	3	2	2	0	2	2	0	3
9	2	0	4	4	3	1	4	6	6
3	3	6	6	2	6	3	4	6	6
9	0	6	2	6	0	1	6	3	0
6	1	3	2	2	3	0	0	9	3
9	1	9	4	0	9	2	4	3	9
3	3	3	2	2	3	3	2	3	3
48	11	33	24	20	27	13	21	33	33

5. Other indoor games. In similar fashion the following indoor games were engaged in by the pupils of this group during the four years that the Experimental School was in operation:

- | | |
|-----------------------------------|-------------------------|
| 1. Tenpins. | 12. Poison. |
| 2. Bean Bag (several variations). | 13. Dominoes. |
| 3. Indoor Baseball. | 14. Quoits. |
| 4. Ball Game. | 15. Duck on a Rock. |
| 5. Tops. | 16. Hide and Seek. |
| 6. Spin the Plate. | 17. Marbles. |
| 7. Ring Toss. | 18. Captain Pin. |
| 8. Cylinder. | 19. Hiding the Thimble. |
| 9. Ruth and Jacob. | 20. Potato Game. |
| 10. Checkers. | 21. Blindman's Buff. |
| 11. Fox and Geese. | 22. Tag. |
| | 23. Charades. |

Outdoor Games

1. Selecting Volley Ball. In discussing at one of the play conferences games to engage in, Jeff wanted to know if it would be possible for his group to learn how to play Volley Ball. He said that he had observed the pupils of the Third Group playing this game and that it was great fun to bat the volley ball over the net. Onal remarked that he thought the game was very interesting, but rather doubted that they could play it. He thought that the volley ball net was too high for them. Virgil immediately stated that Ralph (Third Group pupil) had told him that the net was always regulated according to the height of the players. The teacher remarked that Virgil was right and that she was of the opinion that they could easily learn the game. After discussing these and other phases of the game, the pupils decided to try a game of Volley Ball at the next conference period. The teacher suggested that it would be well for each pupil to study the rules of the game in the meantime. She said that in the library there were six books on Volley Ball and that she would be glad to explain any points that they might not be able to

understand. Jeff agreed with the teacher's suggestion and remarked that he would like to see one of the books. He thought that it would be impossible for them to engage in the game without knowing the rules.

2. Planning the game. At the next conference the pupils discussed the rules of the game, method for keeping scores, and selecting the teams. Onal suggested that they could use the Indoor Score Board for keeping the scores. Jeff thought that it would be necessary for them to appoint some one to keep the scores, since it would be impossible for the players to do this. Iona wanted to know how they could select the teams. Kenneth said that he thought they could select the teams as they did in playing Town Ball. He remarked that he would like to be one of the captains. In discussing Kenneth's suggestion the pupils agreed to ask the chairman to appoint one score keeper and two captains. Jeff appointed the following:

1. *Score keeper* — Virgil.
2. *Captains* — Kenneth and Iona.

After discussing thoroughly the rules of the game, deciding on form for score board, and selecting the teams, the pupils decided to spend the next conference period in playing Volley Ball.

3. Playing Volley Ball. The pupils spent all of the next conference period in playing Volley Ball. It is needless to say that they greatly enjoyed the game. The score was close, as both teams played about equally. Iona's team, however, was the winner. Volley Ball thenceforth was a very popular game among the pupils of this group.

4. Other outdoor games. In similar fashion the pupils of this group engaged in the following outdoor games during the operation of the Experimental School:

- | | |
|---------------------------|------------------------|
| 1. Pussy Wants a Corner. | 5. Farmer in the Dell. |
| 2. Cat and the Mouse. | 6. Blindman's Buff. |
| 3. Mulberry Bush. | 7. Hide and Seek. |
| 4. Drop the Handkerchief. | 8. Muffin Man. |

- | | |
|------------------------|-------------------------|
| 9. Blackman. | 18. Potato Race. |
| 10. Dare Base. | 19. Roll Ball. |
| 11. Town Ball. | 20. Two-old-cat. |
| 12. Hand Ball. | 21. Tag Ball. |
| 13. Baseball. | 22. Ball Passing Relay. |
| 14. Croquet. | 23. Relay Races. |
| 15. Slap Jack. | 24. High Jump. |
| 16. Dodge Ball. | 25. Standing Jump. |
| 17. Rolling Hoop Race. | 26. Arch Ball. |
| 27. Tether Ball. | |

Dramatization

1. Little Boy Blue. Christene at one of the story conferences told the story of Little Boy Blue. When she had finished, Kenneth wanted to know if it would be possible to act out Christene's story. Coy thought that the school lawn in front of the school could be used to represent the meadow. Jeff suggested that a pile of straw would make a good representation of the haystack. Thelma wanted to know what they could use for sheep and cows. Onal thought that some of the pupils might represent the sheep, others the cows. After discussing the story and various suggestions the pupils decided that it would be possible to act out Little Boy Blue. Dean at this point suggested that he would like to see the story acted out very much. Other pupils expressed the same desire, and after talking the matter over the pupils decided to dramatize Little Boy Blue at the next play conference.

The pupils in planning the dramatization agreed that one corner of the lawn in front of the school could be used to represent the meadow and that the opposite corner could be used to represent the cornfield. Onal suggested that Gladys, Mary, Ruby, Lucile, Eva, Beulah, Allie, and Thelma represent the sheep, and that Virgil, Coy, Fred, Paul, and Dean represent the cows. Jeff's suggestion that a pile of straw could be used to represent the haystack was approved and he was appointed to secure some for this purpose. Virgil at this point suggested that Jeff act out

the part of Little Boy Blue. Thelma immediately suggested Iona for this part. After some discussion the pupils decided to vote on whether they wanted Jeff or Iona to act out the part of Little Boy Blue. As a result Jeff was selected for the part by one vote over Iona. Paul said that Kenneth could act out the part of the dog well and that he suggested him for this part. His suggestion was approved.

The teacher at this point suggested that two pupils should be appointed to lead the play — to ask and answer the leading questions. Iona wanted to know what these pupils could say. The teacher remarked that one pupil could ask, "Have you seen Little Boy Blue anywhere?" and another could reply, "He's under the haystack fast asleep." Iona immediately caught the teacher's suggestion and suggested that one pupil could also say, "Will you wake him?" and another could reply, "No, not I, for if I do he'll be sure to cry." Kenneth said that one pupil could walk up to Little Boy Blue and say, "Little Boy Blue, O, Little Boy Blue, come blow your horn; the sheep's in the meadow and the cow's in the corn," and that Jeff, representing Little Boy Blue, could then jump up and blow his horn. Christene wanted to know of Jeff what he expected to use for his horn. Jeff replied that he did not have any horn, but he thought he might use his hands for this purpose. Carl said that he had a tin horn at home that he had received as a Christmas present and he thought that would be just the thing for Jeff to use. Jeff wanted to know of Carl if he would lend him his horn. Carl said that he would be glad to do so and that he would bring it to school the next day.

Thelma said that she thought they had not finished the play, since the sheep were still in the meadow and the cows were in the cornfield. Carl suggested that after Little Boy Blue had tooted his horn the dog, Kenneth, could then appear and chase the sheep out of the meadow and the cows out of the corn. The teacher remarked that she thought Carl's suggestion was an excellent one. His suggestion was approved as the closing scene of the play. Fred said that he would like to suggest Iona and

Carl to act out the parts of the two leading characters in the play, as he thought that they could act these parts well. After some discussion Carl and Iona were selected for these parts. The following is the plan for dramatizing Little Boy Blue as worked out by the pupils.

How to Dramatize Little Boy Blue

- I. *Scene*: Lawn in front of school — one corner representing the meadow, the opposite corner the cornfield. A stack of straw for the haystack in the meadow. Little Boy Blue lies asleep under the straw. The girls, representing the sheep, stand in the corner that represents the meadow; the boys, representing the cows, stand in the opposite corner, which represents the cornfield.
- II. *Characters*: Carl and Iona, leading characters; Kenneth, the dog; Jeff, Little Boy Blue; Gladys, Mary, Ruby, Lucile, Eva, Beulah, Allie, and Thelma, the sheep; Virgil, Fred, Paul, Coy, and Dean, the cows.
- III. *The Play*:

[Carl discovers sheep in meadow and cows in corn. He walks about the lawn, calling Little Boy Blue.]

CARL: Little Boy Blue, O, Little Boy Blue, come blow your horn; the sheep's in the meadow and the cow's in the corn.

[Carl meets Iona in center of lawn.]

CARL: Have you seen Little Boy Blue anywhere?

IONA: Yes, he is here under the haystack, fast asleep.

CARL: Will you wake him?

IONA: No, not I, for if I do he'll be sure to cry.

CARL: I will. *[He goes to Little Boy Blue and shakes him.]*

Little Boy Blue, O, Little Boy Blue, come blow your horn; the sheep's in the meadow and the cow's in the corn.

[Little Boy Blue then jumps up and, after rubbing his eyes a moment as if crying, blows his horn.]

JEFF: Toot-toot, toot-toot, toot-toot.

[Kenneth rushes first to one corner of the lawn and then to the other, driving the sheep from the meadow and the cows from the corn. Pupils, then, all retire.]

The pupils decided to copy the above plan in their Play Folders so that each could study the general plan of the play as well as the individual parts. They agreed in this connection to act out the play at the next play conference.

The pupils at the next conference acted out the play just as they had planned it. Each pupil played his part very successfully. It is needless to say that they got much genuine fun out of their little play.

2. Other stories dramatized. In similar fashion the following stories were dramatized by this group of pupils during the four years that the Experimental School was in operation:

1. The Story of the Boyhood of Lincoln.
2. Little Black Sambo.
3. The Gingerbread Boy.
4. The Three Bears.
5. The Lion and the Mouse.
6. Little Red Riding Hood.
7. Jack and Jill.
8. Little Jack Horner.
9. Mistress Mary.
10. Old Woman and Her Pig.
11. Little Miss Muffet.
12. Old Mother Hubbard.
13. The Little Red Hen.
14. Jack and the Beanstalk.
15. The Hare and the Tortoise.
16. The Fox and the Grapes.
17. The Fox and the Cat.
18. The Four Musicians.
19. The Crow and the Pitcher.
20. The Boy That Cried Wolf.
21. The Three Christmas Trees.
22. The Three Wishes.
23. The Hare and the Hedgehog.
24. Grandmother's Graduation (play).
25. How Old Mr. Toad Won the Race.
26. The Country Mouse and the City Mouse.

27. The Three Pigs.
28. The Lambkin That Went to See Granny.
29. Three Billy Goats Gruff.
30. The Dog and His Shadow.
31. The Elves and the Shoemaker.
32. The Baby Show (play).
33. The Mother Goose Play (play).
34. Chicken Little.
35. The Pancake.
36. Goats in the Rye Field.
37. Epaminondas and His Auntie.
38. Hansel and Gretel.
39. The Wise Men of Gotham.
40. The Mouse, the Cat, and the Cock.
41. The Fox That Lost His Tail.
42. Mistress Mary Gives a Garden Party (play).
43. The Wee Man and the Huge Cow.
44. See, Saw, Up and Down.
45. The Little Patriot (play).
46. Our Thanksgiving (play).
47. The Goats in the Turnip Field.
48. St. Valentine's House (play).
49. Christmas Stockings (play).
50. Washington and the Hatchet (play).
51. Little Pumpkin's Thanksgiving (play).
52. Miss Muffet's Christmas Party (play).
53. Santa Claus and the Mouse.
54. A Visit From St. Nicholas (play).

Folk Dancing

1. **Ride a Cockhorse.** In talking over what they would like to engage in at one of the play conferences, Iona suggested that she would like to play Ride a Cockhorse. Carl stated that he would like to play a game of Tenpins. Neva wanted to know if the group would like to act out the "Old Woman and Her Pig." Thelma said that she preferred to play the Grandmother Game. Jeff thought, inasmuch as the weather was so pretty outdoors that

it would be a good time to have a game of basket ball and suggested that the group engage in one. Carl remarked that they could not engage in all of the games suggested and that he thought the group should vote on the suggestions so that one could be selected to play. Carl's suggestion was approved and he was appointed to take the vote of the group. The vote resulted in a majority of the pupils favoring the "Ride a Cockhorse Dance." The dance included the following little song:

Ride a cockhorse
To Banbury Cross
To see a fair lady
Ride on a white horse;
Rings on her fingers
And bells on her toes,
She shall have music
Wherever she goes.

The pupils and teacher spent some time discussing a plan in one of the reference books for playing Ride a Cockhorse. After suggesting and adopting several changes in the book plan, the pupils agreed upon the following procedure in playing Ride a Cockhorse:

1. Each boy select a girl for his partner.
2. Couples form a circle facing in line direction; girls in back with hands on boys' shoulders; boys in front with hands on hips.
3. All pupils sing four lines and gallop eight steps around the circle by placing the right foot forward and bringing the left foot up to the right with a hop.
4. At the end of the fourth line, immediately face the center of the circle and extend arms vertically upward, and then sing fifth line, jumping up lightly on toes on words "rings" and "fingers" and at the same time shaking the fingers.
5. Then quickly place back of hands on hips. While singing the word "bells" hop on the left foot and touch right toe in front; on word "toes" hop, replacing right foot and touching left toe in front.
6. Take four skipping steps, swinging partners and coming back to place while singing the last two lines of the song.
7. Piano music.

After the pupils had worked out the above plan, they proceeded to select their partners, which resulted as follows: Fred and Beulah; Allie and Christene; Virgil and Neva; Carl and Gladys; Coy and Mary; Paul and Ruby; Dean and Lucile; Onal and Eva; Jeff and Iona; Kenneth and Thelma.

Iona suggested that Jewell, a member of the Third Group, be asked to play the piano. Her suggestion was approved and she was appointed to see Jewell regarding this matter. Jewell accepted.

The plans completed, the pupils decided to spend all of the next play conference engaging in the "Ride a Cockhorse Dance." They spent thirty minutes enjoying themselves immensely, dancing and singing with the piano music.

2. Other folk dances. In similar fashion the pupils engaged in the following folk dances during the four years that the Experimental School was in operation:

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| 1. Hickory, Dickory Dock. | 10. Bean Porridge Hot. |
| 2. Grandmother Game. | 11. Three Crows. |
| 3. Shoemaker's Dance. | 12. I See You. |
| 4. Chimes of Dunkirk. | 13. The Pigeon House. |
| 5. German Clap Dance | 14. A Moonlight Walk. |
| 6. Ace of Diamonds. | 15. Clap Dentsen. |
| 7. Virginia Reel. | 16. Here We Go round the Mul- |
| 8. Lads and Lassies. | berry Bush. |
| 9. Pop Goes the Weasel. | 17. May Pole Dance. |

Parties

1. Iona's birthday party. Iona remarked at one of the group conferences that her birthday came on the next Sunday and that her mother said that she could have a party at her home. She wanted to know if the pupils would like to visit her home on that date. Thelma stated that she would like to go very much and that she was confident her mother would be willing for her to attend. Carl said that he surely would go. Mary remarked that

she would have to ask her mother before she could promise. Jeff thought that all the pupils would like to go and that their parents would permit them to do so since they had given them permission to attend Neva's party last year. He inquired of Iona at what time on Sunday they could have the party. Iona replied that almost any hour would be convenient for her and that she would be glad to leave this for the pupils to decide. Carl suggested that some hour in the afternoon would be best. Neva remarked that it would be necessary for the party to be held during the day since she could not go so far at night. Jeff said that he could not come Sunday morning, but that he could attend at any hour in the afternoon. He thought that it would be best to find out how many pupils would like to visit Iona's home before deciding on the particular time. Iona agreed with Jeff's suggestion. She stated that unless the pupils of her group could attend she did not care about having the party. Jeff at this point inquired how many thought they would like to visit Iona's home on the following Sunday. All the pupils voted that they would be glad to go if their parents consented. More than a majority stated in this connection that they were sure their parents would be glad to let them go, since they had permitted them to attend Neva's party last year.

Jeff then suggested that they set three o'clock Sunday afternoon as the hour for the party. Neva suggested one o'clock; Thelma suggested four o'clock. Carl objected to Thelma's suggestion on the ground that they would not have enough time left in the afternoon for the party. After considering Carl's objection Thelma agreed with him and withdrew her suggestion in favor of Jeff's. At this point several other pupils stated that they favored Jeff's suggestion. Jeff then asked how many favored his hour. More than a majority favored it; consequently they set three o'clock as the hour for meeting at Iona's home. Iona at this point asked the teacher whether she could attend. The teacher said that she would be very glad to spend the afternoon at her home, and that she knew they would have a good time.

Christene wanted to know what they would do at the party. Iona replied that she would be glad to have the pupils do almost anything they wanted to do. Jeff suggested that they could play games. Thelma thought that telling stories would be good fun if each pupil would select a funny story and not tell it until the party. Mary suggested that they could dance some of the folk dances. Iona said that it would be impossible for them to dance since they had no piano in her home. Fred remarked that making ice cream would be more fun, since that was what they had done at Neva's party last year. Iona suggested in this connection that if they could work out a program for the party at school she was sure they would have a better time. Mary agreed with Iona and stated that she once attended a party in which they did not have a very good time because they did not have anything to do.

Neva remarked that at her party last year they told stories, played games, and served ice cream. Mary said, "Yes, and we had lots of fun, too." Thelma suggested that a part of the program be given to stories. She thought it would be real fun for each pupil to prepare a story to tell and not say anything about it until that evening and then see who could tell the funniest one. Iona thought Thelma's suggestion was a good one. Neva remarked that she had a very funny story to tell. Jeff suggested that they should have some games. He thought that after they had told their stories they should have games of Checkers, Rook, Flinch, Dominoes, Old Maid, Fox and Geese. Carl wanted to know from the teacher if it would be possible for them to use the school phonograph. He said that he would take it and see that it was returned in good condition. The teacher replied that she could see no reason why they should not have the use of the phonograph and consented to let Jeff take it.

Iona remarked that she wanted to serve some sort of refreshments. She inquired what would be suitable. Fred said that he favored ice cream. He thought that the pupils could assist Iona in making it on the evening of the party. Neva stated that she

had served cookies with the ice cream at her party last year. Iona was of the opinion that if they served ice cream they should have some cookies. The teacher agreed with Iona and remarked that they could prepare the cookies at school on the day before the party and that she would be glad to assist them, since she had planned to be at the school building on Saturday anyway. As a result of this discussion, the pupils agreed on the following program of activities:

Iona's Birthday Program

- I. *Phonograph music*: Stories and songs.
- II. *Stories*: Each pupil select and tell a funny story.
- III. *Games*: Checkers, Flinch, Rook, Fox and Geese, Dominoes, Old Maid.
- IV. *Refreshments*: Ice Cream and Cookies.

The program was carried out by the pupils as planned. They spent two hours at Iona's home telling stories, playing games, and eating ice cream and cookies. Every pupil of the group attended. The pupils decided that Neva told the funniest story: "Why Peter Rabbit Has a Short Tail."

2. Other parties. In similar fashion the pupils of this group engaged in the following parties at their homes during the four years that the Experimental School was in operation:

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| 1. Card Party. | 4. Valentine Party. | 7. Singing Party. |
| 2. Game Party. | 5. Easter Party. | 8. Story Party. |
| 3. Hallowe'en Party. | 6. Ice Cream Party. | 9. Doll Party. |

2. The Projects of the Second Group

The projects engaged in by the pupils of this group were a continuation of those begun in the First Group. The pupils continued to engage in games, parties, folk dances, and dramatizations just for the sake of the fun that there was in these projects.

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The projects listed below were selected and engaged in by the pupils of this group during the four years that the Experimental School was in operation.

Outdoor Games

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| 1. Volley Ball. | 12. 25 and 50 Yard Dashes. |
| 2. Baseball. | 13. Running Broad Jump. |
| 3. Town Ball. | 14. Tether Ball. |
| 4. Basket Ball. | 15. Skating. |
| 5. Catch Ball. | 16. Swimming. |
| 6. Dodge Ball. | 17. Relay Races. |
| 7. Hand Ball. | 18. Golf. |
| 8. Croquet. | 19. Exchange Tag. |
| 9. Tennis. | 20. Leap Frog. |
| 10. Dare Base. | 21. Prisoner's Base. |
| 11. Horseshoe. | 22. Boxing. |

Indoor Games

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| 1. Rook. | 7. Dominoes. |
| 2. Pit. | 8. Chess. |
| 3. Checkers. | 9. Old Maid. |
| 4. Fox and Geese. | 10. Hand Ball. |
| 5. Bunco. | 11. Indoor Baseball. |
| 6. Flinch | 12. Tenpins. |

Parties

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|----------------------|---------------------|
| 1. Birthday Party. | 6. Ice Cream Party. |
| 2. Card Party. | 7. Singing Party. |
| 3. Game Party. | 8. Story Party. |
| 4. Hallowe'en Party. | 9. Valentine Party. |
| 5. Easter Party. | 10. Dancing Party. |

Folk Dances

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| 1. Lassies' Dance. | 5. Ride a Cockhorse. |
| 2. Swedish Clap Dance. | 6. Norwegian Mountain Dance. |
| 3. Irish Jig. | 7. To Market, to Market. |
| 4. How-do-you-do? | 8. A Moonlight Walk. |

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| 9. Salutation Dance. | 16. Bouncing Heart. |
| 10. Reap the Flax. | 17. Irish Lilt. |
| 11. German Clap Dance. | 18. Clap Dentsen. |
| 12. Hungarian Peasant Dance. | 19. Here We Go round the Mul-
berry Bush. |
| 13. Hot Cross Buns. | 20. Grandfather Game. |
| 14. Bro Bro Breda. | 21. Farmer in the Dell. |
| 15. Pop Goes the Weasel. | |
| 22. May Pole Dance. | |

Dramatization

1. **The First Thanksgiving.** *Selection.* As Thelma and Grace were walking to school on Monday morning Thelma said to Grace that she was so glad that next week they would only have to go to school on Monday and Tuesday as Thanksgiving holidays started on Wednesday. Grace agreed that she was glad and said that she was going to have an awfully good time Thanksgiving, as her cousins from the city were coming down to spend Thanksgiving with her. Barbara and Sue came up just then and they also began talking about Thanksgiving. Both told of the songs they were to sing about Thanksgiving at Sunday School the next time, and Barbara said that her Sunday School class was going to help decorate the church. "We're going to put pumpkins and corn and all kinds of things that farmers raise, around the altar," she said.

They had reached the school by this time and Robert and Phil overheard them. "I'll bet you girls don't know how all this about Thanksgiving started," Phil said, "but I do." "So do I," Grace said quickly. "The Pilgrims started it, and America is the only country in the world that has Thanksgiving. The Pilgrims all got together and had one great big dinner for everybody in town, because they were so thankful to be saved from starvation. And do you know they had Indians there? Wouldn't that be exciting, girls?" Phil and Grace were the only ones who knew the story of the first Thanksgiving, and the others immediately began asking excited questions about it. They grew so interested in the

story that Sue exclaimed, "Oh, I think it would be such fun to have a play about the first Thanksgiving, and I know the teacher would tell us more about it and help us."

Planning. "I'll be an Indian chief," said Bob, "because I have a whole Indian suit, tomahawk and all." All the boys wanted to be Indians, but Grace said that some would have to be Pilgrims and Lois said that there ought to be some Indian women too, and that she would like to be one, as she, too, had an Indian suit. It was finally decided that there should be both Indian men and women, and that Bob, Phil, Lawrence, Jim, and Hugh should be Indian warriors; Lois, Martha, Louise, Katherine, and Sue, Indian women; while Grace, Thelma, Barbara, Ann, Harriet, and Rose were to be Pilgrim women. John, Bruce, Henry, Frank, and William were persuaded to be Pilgrims instead of Indians when they found that they could carry long guns all the time. Lester readily agreed to be Governor Bradford, but they had more trouble in persuading Harold to be the preacher. Grace said that there should be some Pilgrim children too, and Norman, Mary, Herbert, Walter, and Lulu, the smallest children in the class, were given this part. Lois suddenly thought about papooses and asked if they supposed they could borrow a baby or two for papooses. Sue and Martha had baby brothers but they also had grave doubts about their mothers allowing them to borrow them for such a purpose, so Thelma suggested that they use dolls. Katherine said that she had a real Indian doll that her father had brought her from Arizona, and they all agreed to use their dolls.

When the teacher heard of the plan she encouraged them and suggested that each find out some more about the first Thanksgiving and then after they knew the story well they could dramatize it. The children agreed, and by the next day everyone was able to tell something about the first Thanksgiving. Grace told the story of the terrible hardships the Pilgrims suffered after they landed in the wilderness in midwinter, and of how when at last there was food, and each had a little log home they decreed a day

to be set aside to thank God for their blessings. Then she described the first Thanksgiving dinner ever held, telling how carefully they had to divide the food. Phil brought many pictures of Pilgrims, including a picture of the landing of the Pilgrims, of Governor Bradford, and of the Pilgrims going to church. Ann had some pictures of Pilgrim women and children and of the first homes of the Pilgrims, and Lois and Bob had many pictures of Indians. The picture that was most helpful, however, was a picture of the First American Thanksgiving, brought by Martha. The children all looked at these pictures and examined and discussed the costumes. They decided to make the costumes that had to be made, next time.

As a result their next meeting was a busy one. All the girls brought pieces of white cloth from home, and with their scissors cut out the little white caps of the Puritan maids and matrons, while the boys covered large cardboard hats, cut in Puritan style, with black crepe paper. The girls after looking at the pictures decided to wear long black dresses and little white aprons, borrowed from their mothers, and the little white caps they were making. When the boys were discussing their costumes Grace and Louise said all they would need were the big hats they were making, and a white collar, and that they could wear their own suits, as Pilgrims wore knee breeches, but Ann reminded them that they must have silver buckles on their shoes. At this Henry declared that he was going to wear one of his father's suits, and had already borrowed it. He said that he never got a chance to wear long pants anyway unless it was for something like this. "But your father's suit will swallow you," protested Grace, "and anyway you mustn't dress as you want to, but as the Pilgrims actually did." "So will your mother's dress swallow you," retorted Henry, "and if I can't have a little fun I won't be in your old play." Harold said he didn't mind wearing his same clothes and he'd go on and be the preacher like he promised, but he would not make a sissy out of himself wearing white collars and cuffs, and silver buckles. "Then you'll spoil the whole thing," said

Grace, half crying. "I'm not going to be in it at all if it can't be done right," declared Barbara. Things were at a standstill for a while, but finally Lester proposed a compromise which was accepted. It was agreed that the boys should wear long trousers with leggins to make them look like knee breeches, and wear plain white collars and cuffs, and large belts around their coats.

Bruce won over the other boys in getting the part of Miles Standish, as he said he could wear the sword that his grandfather carried in the Civil War, and none of the other boys had swords. The boys who were to be Pilgrims selected their parts then. Their parts as they were finally decided were: Lester, Governor Bradford; Harold, Elder Brewster; John, Allerton the Councillor; Henry, John Alden; Frank, Mr. Winslow; and William, a Pilgrim soldier. Bob, as he was the only boy with a complete Indian suit, was Massasoit, and Lawrence, Phil, Jim, and Hugh were Indian warriors. Grace was chosen to be Mrs. Brewster; Thelma, Mrs. Winslow; Barbara, Madam Hopkins; Ann, Priscilla Alden; and Harriet, Mrs. Allerton. Rose was a Pilgrim woman. Barbara said she would use her big doll and doll cradle for little Oceana, who was born at sea. The Indian women and the Pilgrim children had nothing to say, so they were told to make up the crowd around the table.

Having now decided on the characters and costumes, Barbara suggested that the next thing to do would be to plan the scenes and speeches of the characters, but as it was time for that meeting to be over, this was left till next time. At that time the teacher suggested that Hugh, who wrote very plainly, go to the board and write down the description of each scene and write each speech as they worked it out in their discussion. She said that the children could all copy this and study it at home so that they would all become thoroughly familiar with the play. Everyone agreed to this, and after Hugh had gone to the board they began planning the scenes.

Henry said that the first scene could show a man reading in the newspaper the announcement of the first Thanksgiving, but

all the other children laughed at him and reminded him that there were no such things as newspapers in those days. The teacher remarked that Henry had the right idea anyway, as the opening scene should explain to the audience how the Thanksgiving was planned. Katherine suggested that they have the scenes show as much as possible of the life and habits of the Pilgrims, and that she wished one could be a scene in the interior of a Pilgrim's home. She said that she had been in the attic of her grandmother's home the night before and had found an old spinning wheel, and that her grandmother said she might use it in the play if she wished. The children were all enthusiastic about this plan, and Louise said that they could have the first scene in one of the homes, and have a group of Pilgrim men and women discussing the plans for Thanksgiving. She said they could bring out in their speeches how it all came about. Barbara said it should be in her home since, as she was supposed to have a tiny baby, she would most likely remain at home. Everyone agreed that this was reasonable, and Hugh was instructed to write on the board:

Scene 1. A room in the home of Madam Hopkins.

Bob said he thought they ought to have one scene in the forest in the Indian camp, and this also met with favorable acceptance. Ann suggested that in this scene Miles Standish, Governor Bradford, and Councillor Allerton, accompanied by other men, could carry the invitation to the Indians. William wanted to know how Ann thought the Indians would understand the white men, but Ann reminded him of the story of the Indian who appeared in the streets of Plymouth shouting out, "Welcome," and told him that the Indians and the Pilgrims had much communication with each other; so that scene also was accepted.

Helen wanted the next to be the Thanksgiving dinner, but Lulu objected strongly to this, saying that they ought to have one showing how the table was arranged and the food divided so carefully, and this scene also was used. All agreed that the last scene should be the Thanksgiving dinner.

The scenes and acts as worked out by the children and written on the board by Hugh were:

- Act 1. Scene 1. A room in the home of Madam Hopkins.
- Act 1. Scene 2. The camp of Massasoit and his Indians in the forest.
- Act 2. Scene 1. An open spot in front of the homes of the Pilgrims.
- Act 2. Scene 2. The Thanksgiving dinner in the same place.

"What must you do now?" asked the teacher, as soon as they had all copied these scenes. "Plan the speeches," said Thelma and Grace almost together. But the teacher shook her head, saying, "There is another step." None of the children could imagine what this was, so the teacher said they should make out a property list, and when they said they didn't know what that was, she said it was a list of everything they would need in each scene. They immediately planned one as follows:

- Act 1. Scene 1. Spinning wheel, rough chairs, cradle, and other furniture to be found around the school.
- Act 1. Scene 2. Tents, and a peace pipe.
- Act 2. Scene 1. One of the study tables in the library, dishes, chairs, and food.
- Act 2. Scene 2. Same.

Mary said she had told her mother about the play and she had said that she hoped they would not attempt to have any of the scenes outside as it was too cold for them to be out long, especially Mary, who had a bad cold. The boys clamored to have at least the forest scene outside but they were overruled, and it was settled that the scenes should be staged in the school-room.

"Say, what are we going to do for something to eat at this dinner?" suddenly demanded Bob. "I'm afraid we're going to have to make believe," said Harriet doubtfully. And Bob an-

swered with disgust, "Aw shucks! That won't be any fun. You girls are going to ruin this play yet." "We don't need to make believe," said Grace quickly. "I'm sure all our mothers would give us something to bring and we can have a real dinner. That will make it much more real, and it will be lots of fun." No one was found who could not bring something and the idea of having a real dinner was received enthusiastically. While they were still talking this over, Lawrence called their attention to the fact that the hour was almost up and that they had no idea of what they were to say, and this quickly changed the subject.

Barbara said that in the first scene she would be seated in her home with her children and that when the other Pilgrim women knocked she would naturally tell them to come in and have a seat; they would then talk and one of the Pilgrim women might say, "Will you be able to help us with the preparing and serving of the food for our day of Thanksgiving, Madam Hopkins?" and that they could then all discuss the plans and events among themselves. Lester thought that for the second scene the Governor should make a speech to the Indians, and that Massasoit should make a speech of acceptance and then they should smoke a peace pipe. Lawrence said his father would be awful mad if he smoked tobacco, but Bob said they would use shucks. Katherine agreed to furnish the peace pipe, her father having brought one from Arizona. Lester said he was willing to write the speech he would make as Governor Bradford. They decided that short speeches should be made at the Thanksgiving dinner, and that they should sing a psalm. Harold refused to ask a blessing so they were forced to compromise upon all saying the Lord's Prayer, and the Twenty-third Psalm.

Execution. Everyone wrote or copied their speeches and began practising at the next meeting, which was on Friday. They held another practice on Monday and a dress rehearsal on Tuesday. The play was presented on Wednesday to quite a large audience, as many of the parents were present. The play as it was presented at that time is as follows:

Cast of Characters

GOVERNOR BRADFORD	Lester
MR. WINSLOW	Frank
ELDER BREWSTER	Harold
ALLERTON, THE COUNCILLOR	John
MILES STANDISH	Bruce
JOHN ALDEN	Henry
PILGRIM SOLDIER	William
MRS. E. WINSLOW	Thelma
MRS. BREWSTER	Grace
MADAM HOPKINS	Barbara
PRISCILLA	Ann
MRS. ALLERTON	Harriet
PILGRIM WOMAN	Rose
CHIEF MASSASOIT	Robert
LOLATAHASSEE, THE INTERPRETER	Roy
PILGRIM CHILDREN — INDIAN WARRIORS	

Act 1: Scene 1

[*Stage Setting: A room in the home of Madam Hopkins. Madam Hopkins seated on a low chair rocking the cradle of little Oceana. Damares Hopkins playing on the floor. There is a knock at the door.*]

MADAM H. [*raising her head*]: Come in.

[*Enter Mrs. Winslow, Mrs. Allerton, and Priscilla.*]

MADAM H.: Come in, dear neighbors and friends. Come in and have seats.

MRS. W.: Thank you, Madam Hopkins. How is little Oceana to-day?

MADAM H.: She is well and strong now, I can say with a thankful heart. She grows better every day.

MRS. A.: Oh, we all have much to thank God for. We have been saved from starvation and death, and in the midst of the most terrible dangers we live in peace and safety. Is it not a fitting time to spend a day in Thanksgiving?

MADAM H.: Indeed it is, but can any of you tell me the final plans for this Thanksgiving? I heard the announcement made in church last Sunday, but I have scarcely been outside since then.

PRISCILLA: I heard them from John Alden and Miles Standish whom I met just now. All are to meet in the meadow Thursday at noon,

where a pleasant banquet will be served to all, amid songs of rejoicing and prayers of thanksgiving. Captain Standish is off with the Governor and the Councillor to invite our good friends Massasoit and his tribe to the dinner.

MRS. W.: Here come Elder and Mrs. Brewster now.

[*Madam H. hastens to open the door. Enter Elder and Mrs. Brewster.*]

BOTH: Good day to you all.

ALL WITHIN: Good day to you.

MADAM H.: We are discussing the Thanksgiving.

MRS. BREWSTER: And may we count on you to help prepare and serve the food?

MADAM H.: Indeed you may!

ELDER B.: That is the right spirit to enter into this day and it is the spirit with which all have entered, so I have no doubt but that we will show our thankfulness with united hearts, and it is my wish that this observance of a day of giving thanks to God may be passed on to our children and to their children, so that we may ever remain a nation that does not forget the Heavenly Father.

MRS. W.: Well, I must go.

OTHERS: So must we.

MADAM H.: Good day, my dear friends.

ALL: A pleasant good morning.

MRS. B. [*from the door step*]: Come early to the meadow, Madam Hopkins, and bring your assigned share of food, for all the women of the village will prepare the dinner there.

MADAM H.: I'll be there.

[CURTAIN]

Act 1: Scene 2

[*Stage Setting: The camp of Massasoit and his tribe in the forest. Massasoit seated cross-legged in the door of his tent. Indian women, children, and braves grouped in back of him. Lolatahassee, the interpreter, stands by his side and interprets the speeches. Enter Miles Standish, Governor Bradford, and Councillor Allerton attended by Pilgrim soldiers.*]

CAPT. S.: Greetings and a salutation to our friend and ally, Massasoit, mighty chieftain of the Narragansetts. I bring you greetings from all the palefaces and I crave from you a boon.

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MASSASOIT: Greetings and a welcome to my friend the brave captain, and to all the palefaces of his tribe. I will grant the boon you ask.

CAPT. S.: It is that you will hear the speech of our noble leader, our Governor.

MASSASOIT: I will hear him. Let there be silence.

Gov. B. [*coming forward*]: Less than a year ago, O mighty chief of the Narragansetts, a little band of white men landed on these strange shores. It was winter, and there was no home and no food, so it happened that sickness came upon the white men, and starvation was not far off. Then the Indian could have slain the white men, but instead he was their friend. He welcomed them and aided them. Now the white man's God has seen fit to bless him and send him prosperity, and in acknowledgment he has decreed a day of feasting and thanksgiving, and it is his wish that the Indians come to his village to-morrow to rejoice with him.

MASSASOIT [*gravely*]: The words of the white chieftain fill me with pleasure. The Narragansetts will gladly join the palefaces to-morrow. Now let the peace pipe go around in token of the friendship between us.

[All sit in a circle and the pipe is passed from hand to hand.]

[CURTAIN]

Act 2: Scene 1

[Stage Setting: The meadow before the village of Plymouth. The women of the village hurry about bringing food and laying the table.]

MRS. W.: Let us make haste. It is near the time.

[Enter Madam Hopkins and Priscilla carrying a pot of corn.]

MRS. A. [*coming up*]: Is that the corn?

MADAM H.: Yes.

MRS. A.: It must be very carefully divided. No more than six grains can be given to one person.

[They divide the food carefully.]

MRS. W.: All is now ready. It is time for the feast. See, the men are approaching with our guests, the Indians.

[CURTAIN]

Act 2: Scene 2

[Stage Setting: The Thanksgiving dinner. The table is spread and laden with food. Governor Bradford sits at the head, then the Pilgrim men and women, and then the Indians. All join in the Lord's Prayer, and the Twenty-third Psalm, when Elder Brewster stands and leads them.]

ELDER B.: Friends and neighbors, all of you know for what a solemn and yet joyful purpose we are gathered here. Let us now eat, drink, and be merry, but with a heart at all times mindful of our blessings.

[The dinner proceeds merrily amid laughter and talk, until at a sign from Elder Brewster all stand and sing a psalm. They are reseated.]

PRISCILLA [rising]: I will bring the pie.

JOHN A. I will help you.

[Exit Priscilla and John. Others laugh and talk.]

[CURTAIN]

Criticism. The children had no chance to discuss the play at school again until after the Thanksgiving holidays, but their first meeting was spent in talking it over. Everyone had something to say about it. Grace said her mother remarked that it was clever and well done. Barbara said she thought the costumes were just like those the Pilgrims wore and were very pretty. Louise remarked that the high school history teacher, who boarded with them, said that it certainly was historically correct and that the children did splendid acting. Sue said she thought it would have been better if they had had more talk in the dinner scene, but that Harold and Lester simply would not make speeches. Harold at this wanted to know what was to keep the girls from talking.

"Oh, well," said Rose, "we had lots of fun playing it."

"And I for one will never forget the Pilgrims and their first Thanksgiving," said Katherine.

2. Associated projects. Several projects arose out of this one. For instance, when the children saw the old spinning wheel they asked dozens of questions about it, and how the colonial Americans made their clothes. They were also very curious about the

early history of the Pilgrims before they came to America. The following projects were thus worked out in this connection:

1. How Colonial Americans made their clothes.
2. How the Pilgrims lived in England.
3. How the Pilgrims lived in Holland.
4. Why the Pilgrims came to America.
5. How the Pilgrims dressed.

3. References used by pupils in this project. The following pictures and books proved very helpful to the children in working out their dramatization:

1. *Pictures:*

The First American Thanksgiving.
 The Landing of the Pilgrims.
 Homes of the Pilgrims.
 Miles Standish.
 Governor Bradford.
 Priscilla and John Alden.
 Pictures of Indians.

2. *Books:*

Bass — *Stories of Pioneer Life* (Pilgrims).
 Brooks — *Story of the Pilgrims*.
 Brooks — *Story of the First Thanksgiving*.
 Guerber — *Story of the Thirteen Colonies* (Plymouth).
 Horsford — *Stories of Our Holidays* (Thanksgiving).
 Pratt — *Legends of Red Children*.

4. Other stories dramatized. In similar fashion the pupils of this group dramatized the following stories during the four years the Experimental School was in operation:

1. The Four Musicians.
2. Robin Hood (adapted).
3. Apollo and Hercules.
4. The Fox and the Grapes.
5. The House in the Woods.
6. The Shepherd Boy.
7. The Fox and the Crow.

8. The Country Mouse and the City Mouse.
9. The Monkey and the Chestnuts.
10. The Christmas Pageant.
11. Columbus Day Pageant.
12. Washington Day Pageant.
13. Lincoln Day Pageant.
14. Easter Day Pageant.
15. Thanksgiving Day Pageant.
16. The Village Blacksmith.
17. The Birds of Killingworth.
18. The Pied Piper of Hamelin.
19. King Solomon and the Ants.
20. King Midas.
21. Joan of Arc.
22. Lincoln, the Boy.
23. St. Valentine's House.
24. The First May Baskets.
25. Epaminondas.
26. Hansel and Gretel.
27. Rip Van Winkle (adapted).
28. Horatius at the Bridge.
29. Grandmother's Kitchen (original).
30. The Boys, the Bees, and the British.
31. The Pine Tree Shillings.
32. Grandmother's Spinning Wheel (original).
33. The Kid and the Wolf.
34. The Mice in Council.
35. Grandmother's Wedding.
36. The Mice, the Frog, and the Hawk.
37. The House, the Cat, and the Cook.
38. The Dog in the Manger.
39. The Little Patriot.
40. The Fox That Played Herdsman.
41. Grandpaw's School (original).
42. The Goats in the Turnip Field.
43. The Quarrelsome Kittens.
44. Christmas in Other Lands.
45. The Eskimo Boy and His Home.

46. The Pony Express.
47. A Southern Plantation of Long Ago.
48. The Indian Boy and His Home.

3. The Projects of the Third Group

The projects engaged in by the pupils of this group were similar to, only more extended than, those of the Second Group. The following projects were selected and engaged in by the pupils during the four years that the Experimental School was in operation.

Outdoor Games

1. The Community Play Day. At one of the play conferences Ralph told about the Community Play Day that he had recently visited at Roller. He mentioned various athletic games and contests that he had observed and wanted to know if it would be possible for his school to arrange for a similar event. He said that the Roller boys stated that they would like to meet the boys of his school for a basket ball game. Jim was sure that he could arrange for a baseball game between his school and the Success School boys. Jewell at this point inquired of Ralph what the girls engaged in at the Roller Play Day. Ralph replied that they engaged in basket ball, hand ball, volley balley, croquet, folk dancing, etc. Rhoda thought that it would be possible for the girls to arrange with the Bethpage School girls for a volley ball game, since that school has a volley ball court. Neva said that she had read in one of the papers that the Rocky Comfort High School girls had challenged any basket ball team in the county for a game. She thought that her team could give them a good game and stated that she would be glad to communicate with that team for the purpose of arranging such a game, since she knew one of the girls quite well. Lee remarked that he could see no reason why they could not plan for such an event for their school. Ralph said that he was sure that his school could arrange for as many athletic contests as were given at the Roller event, and that



EXPERIMENTAL SCHOOL BASKET BALL GIRLS (LEFT), MEET THE NOEL HIGH SCHOOL GIRLS FOR
A GAME

he, for one, would like to assist in planning such an event for their school. He thought that his school had better athletic grounds than the Roller School and that it would be possible to get the surrounding schools to take part in the program of activities. After discussing these and other points the pupils finally agreed to plan a Play Day for their school.

Three problems now confronted the pupils: (1) date for the event; (2) schools to invite; and (3) program of activities. Ralph suggested Friday, October 25, as a suitable date for the event. He thought that date would give them time to prepare the program. Neva suggested Friday, October 5, as a better date, since she feared that the weather might be too cool during the last part of October. Lee objected to Neva's suggestion, on the ground that they could not prepare the program by that date. He thought that Ralph's date would be better, since it would give the visiting schools time to prepare to engage in the activities. He recalled that the weather was pretty during all of October the previous year. Jewell favored Ralph's suggestion and wanted to know how many other pupils favored it. More than a majority of the pupils approved Friday, October 25, as a suitable date for their play day.

Gay wanted to know how many schools participated in the Roller Play Day. Ralph said that there were four visiting schools. He thought that they should invite all of the adjoining schools — Success, Cross Roads, Bethpage, and Barlow. The teacher remarked that she thought that Ralph's suggestion was a good one, since with the four visiting schools she felt that they could plan for a big event. Gay was of the opinion that they should invite the Puckett School. She stated that this school had a good basket ball team and had already challenged other schools for a game. Lee said that he did not believe the Puckett School would attend because of the long distance they would have to come. He stated that he favored the schools suggested by Ralph and wanted to know how many other pupils favored inviting them. More than a majority of the pupils favored Ralph's suggestion and as a

consequence the Success, Cross Roads, Bethpage, and Barlow schools were to be invited to participate in the program of activities.

Lee thought that it would be almost necessary to divide the program into two divisions, one for the small children and the other for the larger ones. The teacher wanted to know if the pupils thought that provision should be made for the parents to participate in the program activities. Ralph stated that the program of the Roller event consisted of two divisions. One division included games, athletic contests, and folk dances for all children from six to twelve years old; the other division was planned for all over twelve years of age, which included parents. Neva wanted to know if the parents contested with each other or with pupils. She stated that she shared the opinion of the teacher that provision should be made for the parents to engage in activities as well as for the children. Ralph remarked that parents contested with each other very largely at the Roller Play Day. He said, however, that in some instances the parents contested with the larger pupils. He thought that the games and contests planned for the older pupils would be appropriate for the parents, and he could see no reason why there should be a separate division planned especially for the patrons of the community. The teacher agreed with Ralph and stated that in her opinion the two divisions mentioned would afford all an opportunity to engage in the activities.

The teacher also said that it would be nice if the schools would prepare a community dinner. Jewell wanted to know at what time the program should begin. She said that she was sure the visiting schools could not possibly arrive earlier than ten o'clock in the morning. Ralph stated that all of the games and contests came in the afternoon at the Roller event and the forenoon was given over to what some called a "Social Period"; that is, the people just chatted to each other. He remarked that they certainly did have a fine dinner. After discussing these and many other suggestions the pupils finally agreed upon the following program:

COMMUNITY PLAY DAY PROGRAM

- 10:00-11:30 SOCIAL PERIOD. We suggest that you meet your friends at this period.
- 11:30- 1:00 LUNCHEON PERIOD. We suggest that you bring your lunch and share with others in a community dinner.
- 1:00- 4:00 PLAY ACTIVITIES. We invite you to participate in any of the following games and contests:

I. OPEN TO ALL UNDER TWELVE YEARS OLD.

1. FOLK DANCING
 - a. Hickory, Dickory Dock
 - b. Lads and Lassies
 - c. Ride a Cockhorse
 - d. Pop Goes the Weasel
2. INDOOR GAMES
 - a. Roly Poly
 - b. Tenpins
 - c. Bean Bag
 - d. Hand Ball
3. OUTDOOR GAMES
 - a. Potato Race
 - b. 25-Yard Dash
 - c. Relay Race
 - d. Running Broad Jump
 - e. Standing Broad Jump
 - f. Volley Ball
 - g. Croquet
 - h. Baseball

II. OPEN TO ALL OVER TWELVE YEARS OLD.

1. OUTDOOR GAMES
 - a. Potato Race
 - b. 50-Yard Dash
 - c. 100-Yard Dash
 - d. Running Broad Jump
 - e. Running High Jump
 - f. Standing Broad Jump
 - g. Standing High Jump
2. TEAM CONTESTS
 - a. Basket Ball
 - (1) Girls: Experimental *vs.* Success
 - (2) Boys: Success *vs.* Barlow
 - b. Volley Ball
 - (1) Experimental *vs.* Bethpage
 - (2) Cross Roads *vs.* Barlow
 - c. Tennis
 - (1) Experimental *vs.* Bethpage
 - d. Baseball
 - (1) Success *vs.* Bethpage

They made beautifully decorated invitations representing fun in the country and sent them to all the patrons of the community and teachers of the adjoining schools inviting them to attend the Play Day. On one side of these invitations appeared the program of activities, as given on page 151.

The other side of the invitations bore the following legend in the best handwriting:

Dear Friend:

You are invited to attend the Community Play Day at the Experimental School, Friday, October 25, beginning at 10 A.M. We invite you to bring your lunch and spend the day with us, participating in the various games and contests and getting acquainted with your neighboring friends and teachers.

Experimental School

In addition to the invitations, the pupils made large paper posters, using the school printing press, announcing the Community Play Day. The posters were placed in conspicuous places in the community.

THE COMMUNITY PLAY DAY

Experimental School

Friday, October 25

Program: Get acquainted with

Your neighbors and teachers and

Participate in: Basket Ball,

Volley Ball, Tennis, Croquet,

Running and Jumping, etc.

BRING YOUR LUNCH AND SPEND THE DAY WITH US

The *Pineville Democrat* had this to say regarding the Community Play Day:

The Editor of the *Democrat* spent one of the happiest days of his life, last Friday, at the Community Play Day, initiated by the Experimental School of this county. The program was something new, consisting of folk dancing, indoor games, running dashes and relay races, jumping, baseball, volley ball, tennis, etc. It was the most successful

event ever held in this county and was attended by more than five hundred children and patrons of that community.

2. Other outdoor games. The pupils of this group selected and learned to engage effectively in the following outdoor games:

- | | |
|----------------------------------|-------------------------|
| 1. Golf. | 11. Running Broad Jump. |
| 2. Football. | 12. Running High Jump. |
| 3. Volley Ball. | 13. Tether Ball. |
| 4. Town Ball. | 14. Sleighing. |
| 5. Hand Ball. | 15. Skating. |
| 6. Basket Ball. | 16. Swimming. |
| 7. Croquet. | 17. Relay Races. |
| 8. Tennis. | 18. Low Hurdles. |
| 9. Dare Base. | 19. Boxing. |
| 10. 25, 50, and 100 Yard Dashes. | 20. Punching Bag. |

Folk Dances

- | | |
|-----------------------------|-----------------------------------|
| 1. The Chimes of Dunkirk. | 10. Irish Jig. |
| 2. The Circle Dance. | 11. German Clap Dance. |
| 3. The Cornish May Dance. | 12. Swedish Clap Dance. |
| 4. Lads and Lassies. | 13. Norwegian Mountain March. |
| 5. Vineyard. | 14. Gossiping Ella. |
| 6. Dutch Dance. | 15. Bouncing Heart. |
| 7. Tyrolienne Dance. | 16. Bleking. |
| 8. Hungarian Peasant Dance. | 17. Hark, Hark, the Dogs Do Bark. |
| 9. Irish Washerwoman. | 18. Lassies' Dance. |
| 19. May Pole Dance. | |

Parties

- | | |
|---------------------|-----------------------|
| 1. Birthday Party. | 7. Hallowe'en Party. |
| 2. Musical Party. | 8. Frankfurter Party. |
| 3. Dancing Party. | 9. Easter Party. |
| 4. Card Party. | 10. Singing Party. |
| 5. Ice Cream Party. | 11. Story Party. |
| 6. Pie Party. | 12. Game Party. |
| 13. Valentine Party | |

Dramatization

1. **The Legend of Sleepy Hollow.** *Selection.* At the conclusion of Mary's telling the story of "The Legend of Sleepy Hollow" at the Story Conference, Eleanor exclaimed, "I don't think that's even funny. You know no one would be superstitious enough to believe what Ichabod did."

"I don't like it either," said Jimmy. "There's too much description for me. That's all it is — just describing things."

"But aren't the characters funny?" added Kate. "Can't you just see Ichabod on that horse?"

"I still think it couldn't ever have happened," insisted Eleanor. "And stories ought to be about things that could really happen."

"I'm sure it could be true," remarked Mary. "I'll bet we could make a play out of it, and if things can be acted out that proves they can happen."

"You want to have another play," fussed Eleanor, "just because that expression teacher from Kansas City thought you looked so sweet in the Christmas Pageant. Well, you needn't get such ideas. I, for one, won't be in any more plays. So there!"

"You're just jealous because she didn't brag of you," retorted Mary.

Only the bell ringing to announce the end of the hour saved the group from what promised to be a most heated discussion with reference to Mary's story. The teacher remarked she thought it might be well for the group to continue the discussion at the next Story Conference.

At the next conference Mary wanted to know what part of the program her group would give at the next Community Meeting. She suggested that a play would be good.

"Let's dramatize Mary's story," suggested Kate.

Kate's suggestion was greeted with a storm of protest.

"It's too hard."

"We haven't time."

"Who would play Ichabod?"

"Let's talk one at a time so we'll be able to understand each other," suggested the teacher. "Kate, defend your suggestion."

"Well, you see our group ought to give some part of the program at the next Community Meeting. The whole school, you know, will attend; so we'll have to give something that everyone would like. I'm sure little and big children would like The Legend of Sleepy Hollow. Of course it won't be easy, but we aren't babies by any means. I guess our group is able to put on The Legend of Sleepy Hollow as well as we did Silas Marner. Everybody thought that was good."

Kate's arguments were convincing, but Eleanor still objected. "There isn't hardly any conversation in it and that's what you make plays out of," persisted Eleanor.

"We could make up things for the characters to say. I believe you would make a good Katrina, Eleanor," the diplomatic Kate replied.

At this Eleanor fairly beamed acquiescence. "Do you really think I would?"

"But if we did make up conversation, that would change the story and that wouldn't be right," piped up Jimmy.

"Oh! I read in a magazine once where it said that it was necessary to change a book a great deal in order to dramatize it," Fred proudly announced. "I guess if real actors do it, it'll be all right for us to do likewise."

"Let's have Rip Van Winkle if we have to give a play," said Jimmy.

"Well, I should say not," vetoed Eleanor. "The Second Group gave that at the last Community Meeting. We won't be imitators."

"What about Enoch Arden?" continued Jimmy.

"That's a good one," exclaimed Joe, as yet unheard. "I'd rather have that."

"Who wants to play that silly story?" questioned Eleanor. "Besides, the other children would not understand it."

"All you do is to object and to fuss, Eleanor Clark," remarked Jimmy.

"Oh, I don't! I don't! Jimmy Johnson, you're the meanest boy I know," exclaimed Eleanor.

"Let's vote on the three stories and then act out the one the majority decides upon," Kate tactfully suggested.

Her suggestion was greeted with approval as Kate's usually were. The result showed two votes favoring Enoch Arden, three for Rip Van Winkle, and seven for The Legend of Sleepy Hollow. Eleanor immediately moved that the Legend of Sleepy Hollow be made the unanimous choice of the group. Her motion carried without a dissenting voice.

"Since the hour is almost over, suppose we all read the story this afternoon or to-night and then discuss it to-morrow at this time," proposed the teacher. The suggestion met the hearty approval of the group.

Planning. The following day the group was buzzing with interest at the beginning of the Story Hour. "Let's choose the characters first," insisted Eleanor.

"I can't remember all of them. I wish some one would name over the list for me," pleaded Louise.

"Why not have them written on the board and then, as we decide who will be who, put their names down beside the characters?" suggested Paul.

"I think that's a good idea," said Elizabeth, "and since it is Mary's story in the first place, why not have her write them down?"

Mary went to the blackboard and wrote the following list:

Ichabod Crane

Katrina Van Tassel

Baltus Van Tassel

Abraham Van Brunt — Brom Bones

"That isn't near all. They are the important ones, but there are several more in the story," said Joe, and added:

Musician

Negro messenger

Guests at party

School children

Old farmer

Group of farmers

"I'm sure that's all," said Eleanor impatiently. "Now, let's choose."

"Fred's the tallest, skinniest boy in the group. I think he ought to be Ichabod," suggested Elizabeth.

"No, let's have Joe, because he can jig so well," said Mary.

"And he's got bigger ears than Fred," added Jimmy.

Kate proposed that the group vote on the two. This was done and Joe was chosen.

"Now who will be Katrina?" wondered Elizabeth. "She is the heroine."

"Eleanor is the only real blonde girl in the group, so I guess we won't have to argue over her selection for that part," said Kate.

No one objected, so Eleanor's name was written on the board. Helen, who had not joined in any of the discussion thus far, leaned over and whispered to Elizabeth:

"I think it's mean to select Eleanor to play the part of the heroine, especially since she just promised to play because she knew Kate would get that part for her."

"Who will be her father?" asked Helen. "I think he ought to be blonde too."

"I'd like to be old Baltus Van Tassel," volunteered Arthur.

Nobody else had any such ambition so his name was added without further discussion. But when it came to the selection of Brom Bones it was not so easy to decide.

"Let's have Jimmy," said Elizabeth.

"I think Jack would make a good one," suggested Eleanor.

"Well, you needn't think I'd be if I had to marry you," retorted Jack.

"Kenneth has dark hair and is athletic. Let's have him," said Fred.

"Now we'll have to vote again!" exclaimed Joe. "I hate voting."

"What will you do when you get to be a man?" wondered Helen. "Then you have to vote lots of times."

"No, you don't. Anyway I just won't vote."

The teacher at this point reminded the boys and girls that they ought to finish planning their play, and that they might discuss the question of voting some other day. The suggestion was cheerfully accepted, and Kenneth was selected to play the part of the hero by the usual manner of voting.

"Spencer is the only one who can play the violin, so he'll have to be the negro musician," said Edith.

"And he can make up like the best nigger," Helen added. "One time we had a circus in our back yard and he was the funniest thing you ever saw."

"Why not let him be the negro messenger too?" suggested Mary. "Then only one person will have to be blacked."

"That's a good idea," said Jimmy.

"Fred can talk just like an old farmer, so let's have him take that part," proposed Mary.

"Ralph, Lee, and Jimmy can be farmers too," added Kate.

Jewell said she would like to be an old lady and would powder her hair to look the part.

"All the rest of us can be school children and the crowd at the party," said Mary. "And that's all the characters."

"We'll have to make the play now," remarked Carolyn. "Let's decide on the scenes to use first."

"What scenes do you think we should have?" inquired the teacher.

"The first one will have to be in Ichabod's schoolroom, and another one at the Van Tassel home at the quilting frolic," suggested Edith, "but I don't know about any more."

"One scene ought to show Ichabod riding home," added Mary.

"There will have to be a short one the Sunday after Ichabod disappeared," said Fred.

"And another short one two years later," added Jack.

"Why not put the two together and save time?" suggested Mary. "We could have it on Sunday at church two years later. The old farmer who has been to New York can mention the incident at this time. Then all can discuss the ghost. And that will finish the play."

The group accepted Mary's suggestion, and finally agreed upon the following scenes:

Scene 1. Ichabod's schoolroom.

Scene 2. The quilting frolic at the Van Tassel home.

Scene 3. Ichabod riding home from the quilting frolic.

Scene 4. At the church two years later.

"What shall I say in each scene?" Eleanor asked.

"Oh, we'll decide on the speeches now," replied Mary. "I'll write them on the blackboard."

"I think in the first scene the pupils in an old-fashioned school should be busily studying their lessons, or slyly whispering behind their books with one eye on the master just as Irving describes it," said Fred. "The negro could come in just then and deliver his message."

"But what would he say?" interrupted Elizabeth. "There isn't any conversation in the story."

"I'll bet I can write a good speech myself for me to say there," remarked Spencer.

"What kind of lessons must we have?" questioned Helen.

"Oh, I know," replied Eleanor. "Ichabod can line the pupils up in front of him and give out a spelling lesson."

"That's a good idea," exclaimed Mary. "I'll borrow papa's old *Blue Back Spelling Book* for Ichabod to use."

"We can have a real old-fashioned spelling lesson, can't we?" inquired Jimmy. "I've heard my grandpa tell how he used to spell when he was a boy. Won't that be funny!"

"But Irving describes Ichabod as impatient and absent-minded," queried Mary. "How are we to show that?"

"I know," exclaimed Helen. "In giving out the spelling lesson,

Ichabod can be impatient with the pupils, and can be absent-minded by letting them go home an hour earlier than they should. He also could let them scuffle out of the schoolroom with a lot of noise."

"Would Ichabod leave with them?" Elizabeth wondered.

"No," continued Helen. "He could go up to a mirror and primp, just like it says in the book."

"Only girls primp!" exclaimed Jimmy disgustedly.

"You just think so," Helen retorted. "I've got a big brother and I know!"

Kate brought the discussion back to the play by adding, "And then he could say, 'If I only had a steed to ride. I'll borrow old Hans Van Ripper's horse,' and go out."

"That would be fine," said Mary. "Now let's work out the second scene."

"I have an idea for the second scene," remarked Fred.

"What is it?" questioned Mary.

"When the curtain goes up for the second scene, the crowd could be eating and talking," explained Fred. "Old Baltus Van Tassel could be standing by the door to welcome the guests. In a minute Ichabod could come in. He would shake hands with him and lead him over to the tea table and say, 'Fall to and help yourself.'"

"How can he eat when there isn't anything to eat?" Joe wanted to know.

"We can pretend," Fred replied.

"Pretend nothing! I want to have real food."

"I know how we can have real food," volunteered Helen. "I'll bet our mothers would give us some. Mine would, I'm sure. We wouldn't need very much."

"I have a better idea than that," remarked Elizabeth. "If we'd ask Miss Osborne, I'm certain she would let us use the Hand-work Hour that morning for preparing the food for our play instead of serving the school luncheon."

"But we've never baked cakes," protested Edith.

"We could learn, couldn't we?" Elizabeth went on enthusiastically. "And she would let us use the big silver teapot too."

"Quit talking about food," Jimmy interrupted. "You make me so hungry I can't sit still."

"And when they had eaten some, the music could start," Fred returned to the composition of the scene.

"What piece shall I play?" Kenneth asked.

"'Turkey in the Straw' would be good," suggested Fred.

"And then the young people could begin dancing," Fred continued. "But I don't know how they would dance. Jazz would never do, and a Virginia Reel is too stately."

"I know," Elizabeth interrupted. "A good old square dance! That's the kind people used in those days. Don't you remember Mr. Jones' description of one at the Community Meeting last year?"

"But we don't know how to engage in a square dance," said Fred.

"I'm sure if we asked her, Miss Osborne would teach us at our next Play Conference," replied Elizabeth.

"That would be grand," enthused Fred. "I've always wanted to learn."

"And Ichabod and Katrina can take the main part," suggested Helen. "I think her father should call off the dance."

"No," returned Carolyn. "Irving says that he was smoking with some old folks. Why not let the musician call the dance?"

Helen agreed with Carolyn's suggestion and continued, "Then they could tell stories like Irving describes. Joe can show by his face how Ichabod is impressed."

"Then the members of the party should go home, because I think this scene is long enough," said Edith.

"And when," Fred continued, "most of them are gone and Mr. Van Tassel is helping the last ones get their wraps on, Ichabod could say to himself, 'I'll have a tête-à-tête with the heiress,' and then go off the stage looking very confident. Then just as everyone has left he could come back on the stage looking crestfallen,

pick up his hat, and say wearily, 'Oh, these women! these women!' and walk slowly off toward the door leading outside. The curtain should fall at this point."

Everyone agreed to Fred's interpretation of the second scene except Jimmy, who thought "it would be lots of fun to see Ichabod propose to Katrina."

"That would never do," said Carolyn, "for Irving says that no one knew what 'passed at this interview.'"

"Let's vote on it," suggested Kate. The group approved the suggestion, and as a result decided to carry out Fred's interpretation of the second scene.

"I've a plan for the third scene," remarked Mary. "My mamma thought it was good."

"Would you like to hear Mary's plan?" questioned the teacher.

All the pupils indicated an affirmative reply, and Mary proceeded as follows:

"I think Ichabod should walk on the stage whistling to keep up his spirits; then stop and look around as if he were scared. Some one behind the curtain could make a strange noise."

"I have a whistle at home that's partly broken. It makes an awful ghostly sound. I'll bring it," offered Jack.

"Then Ichabod could discover riding along near him at the rear of the stage a shadow," continued Mary. "He could stop, look frightened, and stammer out, 'Who are you?' and then walk toward the center of the stage. As he approaches the center of the stage, he would discover the shadow to be the headless galloping Hessian. He could then start to run. Some one could then step from behind the curtain near the approaching shadow and throw something representing a human head at him. Ichabod would fall, rise immediately, and run in the direction of the shadow on the rear curtain representing his horse tied to a post. The supposed Hessian could run off the stage in the direction of his horse and that would end the scene."

"Where's your horse?" inquired Joe. "Irving describes the headless Hessian riding a horse."

"You've omitted the most interesting part of the scene," added Eleanor. "Why not have the Hessian ride a horse on the stage as Irving describes?"

"That's silly," exclaimed Kate. "You couldn't get a horse on the stage."

"Well, I guess we could make a small wooden one, couldn't we?" retorted Joe quickly.

"This was the most difficult part of the scene to work out," explained Mary. "I discussed the use of a horse with Miss Osborne. We agreed that it would be impossible to use a horse because the stage was too small. We decided a shadow representing the headless galloping Hessian cast by something from behind the curtain would be much better, for it would appear the headless man had just alighted from his horse when he walks out on the stage from behind the curtain near the shadow. Then, too, we agreed that all good plays make much use of people's imaginations in filling in such gaps."

"And I suppose that is the reason why you have Ichabod walking on the stage instead of riding a horse as Irving tells us," queried Eleanor.

"Sure," replied Mary. "When Ichabod runs off the stage, he goes in the direction of a shadow representing a horse. One can easily imagine, Miss Osborne and I agreed, that he jumps on his horse and rides away hurriedly."

Mary's explanation for omitting the use of horses in the scene was accepted as the only practical way of representing this episode. Her plan for Scene 3 was then approved in the usual manner.

"Now there's just one more scene to plan," remarked Fred. "Kate, you seem to have thought more about this than the rest of us. How do you think it ought to go?"

"I think the people could be standing around the churchyard talking. One man might say, 'That was a good sermon the parson preached this sabbath morn,' and then an old farmer might say, 'Hans, did you have a good time in New York?' Hans could tell

that he had seen Ichabod Crane alive. Of course, everyone would look surprised and talk about Ichabod's disappearance."

"And one could say, 'And do you recollect how we found his horse without a saddle and with the bridle under his feet at Ichabod's gate the morning after the quilting party at Van Tassels?' " added Elizabeth. "Another might turn to Katrina and say, 'Wasn't that just a short spell before you married Brom Bones, Katrina?' In that way the audience would know she had married him."

Helen suggested, "Some one could say, 'Well, what's Ichabod doing now?' The old farmer telling about him could answer, 'Well, he changed quarters to distant parts; kept school and studied law at the same time; was admitted to the bar; turned politician; has written for the newspapers; and finally was made a justice of the Ten Pound Court.' "

"An old woman could say, 'I still firmly believe Ichabod was spirited away by supernatural means,' added Kate. 'Do you remember how they found in the road leading to the church a saddle trampled in the dirt; tracks of horses leading to the bridge; and his hat near a shattered pumpkin?' "

Eleanor suggested at this point, "Brom Bones could laugh loudly. Then the old farmer could say to him, 'Brom Bones, I suspect you know more about this matter than you ever tell.' "

"This would be a good place for the curtain to fall," remarked Kate.

"I move we accept the scene as agreed upon thus far," said Joe.

Joe's suggestion met with approval. Kate was instructed to copy the wording of the scene as agreed upon.

"What are we going to wear?" Mary wanted to know.

"Just as nearly as we can what Irving says," said Edith. "If everyone will study his own character, we can get the idea of proper costumes."

"Don't you think if I wear an old floppy suit of Dad's that will be all right for Ichabod?" asked Joe.

"Joe, do wear a Windsor tie," begged Elizabeth.

"And a felt hat that is too small," added Helen.

"Eleanor, why don't you wear your hair in two braids over your shoulders like the pictures of Dutch girls?" Edith suggested. "Have it smooth and shiny. Wear a skirt that is long enough to look grown up and short enough to be coquettish. Blue would be pretty, and a blue ribbon in your hair would be lovely. A gold bracelet and a heavy gold chain would complete your costume."

"I'll borrow Aunt Grace's bracelet and Mother's chain," said Eleanor.

"Baltus Van Tassel should wear a plain suit," continued Edith, "and a rather stringy tie to show that he isn't used to wearing one.

"Brom Bones ought to wear a bright tie, red I guess," added Jimmy, "and his hat should be worn on one side."

"The negro should wear a tow-cloth jacket and trousers and an old ragged hat," added Edith. "Oh, I just love to design costumes!"

"What are the rest of us going to wear?" inquired Helen.

"Oh, very simple gingham dresses in the first scene," replied Edith. "Isn't it convenient that Dutch bobs are fashionable now? The girls who have long hair should wear it like I told Eleanor. For the quilting frolic and the church the girls can wear rather long dresses with tight basques and full skirts, and bonnets to match."

"Well, you needn't think I'm going to dress up silly, just like little girls when their mothers are away from home," Jimmy exclaimed.

"The boys could wear their father's suits. I think that would be all right," suggested Kate.

"Yes," Edith conceded, "if they wear starched white blouses with flowing ties in the first scenes."

"What about the stage furnishings?" queried Jack.

"The first scene won't be hard," said Fred. "We just have to get some desks from one of the rooms and put them on the stage."

"That won't do," exclaimed Helen. "I read last night at home in one of the library books, *Schools of Olden Times*, a description

of old-fashioned schools equipped with long benches on each side and a high table and chair in the front for the teacher."

"Let's equip Ichabod's school in that way," suggested Joe. "We can make the benches at our Hand Conferences."

"I saw some benches down in the church building I'm sure we can borrow," remarked Jack.

"Don't forget the broken mirror," added Carolyn. "I can borrow a dandy from grandmother."

"I'll bring the old *Blue Back Spelling Book*," suggested Mary.

"Some hooks along the wall would be good to hang the wraps on," Jack added.

"For the second scene we could use the same walls, but with different furniture of course," said Paul. "Then it wouldn't take long between scenes."

"The tea table could be in the middle at the back. That's plenty of furniture because we will need lots of room to dance," remarked Helen.

"But there must be some chairs," Joe supplemented.

"Where shall we get a table?" asked Elizabeth.

"We can use one of the Reading Room tables," Edith replied.

"They are just the kind we want."

"For the third scene we can decorate the stage with shrubbery and flowers," said Joe. "We want to make it look like the forest."

"What will we use to cast the shadow of the horses on the curtains?" questioned Eleanor.

"I have an idea," exclaimed Jimmy. "My little brother has a big toy horse at home that runs on wheels. It's about three feet tall. We can pull it across the stage behind the curtain. I can get it, I'm sure."

"That will be fine for the Galloping Hessian," added Spencer. "Can we get your little brother to ride it?"

"Sure," replied Jimmy.

"What will we use for Ichabod's horse?" asked Paul.

"Why not cut a horse similar to Jimmy's little brother's from stiff cardboard and place it behind the curtain?" queried Kate.

"It would cast a shadow of a horse on the curtain, and besides Ichabod's horse is stationary."

"But where can we get the cardboard?" questioned Jack.

"I've a big cardboard box at home," replied Spencer. "I'll be glad to bring it to school."

"That's fine," added the teacher.

"Now the only thing we need for the third scene is a pumpkin," added Jimmy.

"You needn't think I'm going to have a pumpkin hurled at my head," objected Joe. "Well, I should say not!"

"That's what Irving says," insisted Jimmy. "You wanted to be Ichabod, didn't you?"

"We could use a Jack o'Lantern just as well," Kate said. "I'll bring one."

"The same scenery with a fence along the back would do for the last scene," Fred thought. "The fence would make it look near the church. The one we used in the dramatization of the 'Village Blacksmith' would be dandy."

"Who's going to do the final composition of the play?" queried May. "We'll need a copy for each player in order to learn the parts."

"I think we need a committee to do this," replied Eleanor. "All that the committee will have to do is to write up what we have already agreed upon here in conference."

"I'd like to serve on that committee," remarked Mary.

"Yes, and so would I," added Kate.

"I move that Mary and Kate write out the play as agreed upon and furnish each of us with a copy," said May.

All agreed to May's suggestion.

"Who'll look after the stage preparations?" inquired Edith. "Seems to me we need another committee for this."

"I'd like to be on that committee," exclaimed Jimmy.

"So would I," said Joe.

"We need three on this committee," remarked Jack. "I'd like to be the third member."

The group approved Jimmy, Joe, and Jack for the committee on stage preparations.

"Who's to have charge of the costumes?" questioned Carolyn. "I'd like to serve on that committee."

"Let me serve on that committee, too," pleaded Edith. "I dearly love to design costumes."

"I'd like to be on that committee, if no one objects," remarked May.

"So would I," said Eleanor, "but it seems to me that three members are enough on any committee. I move that Carolyn, Edith, and May serve on the costume committee."

Eleanor's suggestion was approved.

"Do we need any programs?" asked Louise. "You know we had some at our last play."

"Sure we do," exclaimed Fred. "This is going to be the best play we have ever given. We ought to send a program to every home in the district."

"I'd like to make the programs if some one would help me," remarked Louise.

"I'll help you," replied Eleanor.

"So will I, if no one objects," exclaimed Fred.

"That's enough help," suggested Louise.

Louise's suggestion was approved.

The group approved the following committees to carry forward the dramatization of *The Legend of Sleepy Hollow* in accordance with their conference decisions:

Composition of Play. Mary and Kate.

Stage Preparation. Jimmy, Joe, and Jack.

Costumes. Carolyn, Edith, and May.

Programs. Eleanor, Louise, and Fred.

Execution. Following is the play of *The Legend of Sleepy Hollow* as drafted and presented by the pupils of this group. The group engaged in two rehearsals of the play at the regular Story Conference period before their final presentation of it on the appointed evening.

Cast of Characters

ICHABOD CRANE	Joe
KATRINA VAN TASSEL	Eleanor
BALTUS VAN TASSEL	Arthur
ABRAHAM VAN BRUNT (BROM BONES)	Kenneth
NEGRO MESSENGER	Spencer
NEGRO MUSICIAN	Spencer
FIRST FARMER	Ralph
SECOND FARMER	Lee
THIRD FARMER	Fred
FOURTH FARMER	Jimmy
OLD LADY	Jewell

SCHOOL CHILDREN — GUESTS AT PARTY

Scene 1: Ichabod's School

[*Stage Setting: Schoolroom with high desk and chair at the front end of room. Six seven-foot benches arranged facing the front of room. Door left center back. Broken mirror on wall at left of door. Hooks along wall at right of door. A large switch hangs on a nail at the back of the desk. Twelve pupils are seated on the benches studying their spelling lesson. The teacher occupies his chair in front of room, turning the pages of an old Blue Back Spelling Book. A negro enters.*]

NEGRO: Mistuh Ichabod Crane, Miss Van Tassel says fer me to tell you she is having a merrymaking to her house to-night and you is to come.

ICHABOD: Tell her I accept with pleasure her kind invitation.

NEGRO: Yassuh.

[*Exit Negro.*]

ICHABOD: We will now have the spelling lesson.

[*Children line up against wall with much shoving.*]

ICHABOD [*pointing his finger at first pupil and speaking loudly*]: Mississippi!

FIRST PUPIL: M-i-double s-i-double s-i-double p-i.

ICHABOD: Correct! [*Pointing finger at next pupil.*] Disappear!

SECOND PUPIL: D-i-double s-a-double p-e-a-r.

ICHABOD: Wrong! Go to the foot of the class. You are all excused to-day an hour earlier.

[Children yell, stumble over benches, overturn two, grab hats, and rush out of the door. Ichabod walks to mirror, pats hair, reties tie, and brushes coat.]

ICHABOD [turning from mirror]: If I only had a steed to ride! . . . I'll borrow Hans Van Ripper's.

[Exit.]

[CURTAIN]

Scene 2: The Quilting Frolic at the Van Tassel Home

[Stage Setting: Parlor of Van Tassel home. Table at back center. Outside door at left: inside door at right. Guests stand and sit about room talking and eating. Baltus Van Tassel stands by left door and welcomes guests. Enter Ichabod. Baltus slaps Ichabod on the back and shakes his hand.]

BALTUS: Good evening to you, Mister Crane.

ICHABOD: Good evening to you, Mister Van Tassel.

BALTUS [walking toward table]: Fall to and help yourself.

[Negro at right starts playing "Turkey in the Straw." Ichabod walks over to Katrina.]

ICHABOD: Miss Van Tassel, may I have the pleasure of this dance?

[Ichabod leads her out and all the young people follow and engage in a square dance. At the end of the dance Ichabod walks to right where a group of old folks sit gossiping.]

FIRST FARMER: There was Doffice Martling, a large, blue-bearded Dutchman. He nearly took a British frigate with an old nine-pounder, but his gun burst at the sixth discharge and that was the reason he failed.

SECOND FARMER: There was a rich mynheer, who parried a musket ball with a small sword, in the battle of White Plains. I tell you he felt the bullet whiz around the blade, and to prove it he was ready at any time to show the sword with the hilt a little bent.

THIRD FARMER: Have you heard of the woman in white who haunts the dark glen at Raven Rock in Sleepy Hollow? She died there in the snow and returns to shriek on a winter's night before a storm.

FOURTH FARMER: The headless horseman now patrols the country. He rides a fast horse and carries his head beside him. He tethers his

horse nightly among the graves in the churchyard, and wanders forth.

SECOND FARMER: Old Brouwer, who disbelieves in ghosts, met the horseman returning from his foray into Sleepy Hollow, and was obliged to get up behind him. They galloped until they reached the bridge, when the horseman suddenly turned into a skeleton, threw old Brouwer into the brook, and sprang away over the tree-tops with a clap of thunder.

BROM BONES: Coming home one night, I was overtaken by this midnight trooper. He offered to race for a bowl of punch and I should have won it too, for Daredevil beat the goblin horse down the hollow; but just as we came to the church bridge, the Hessian bolted and vanished in a flash of fire.

[The guests now begin to leave.]

ICHABOD *[at opposite side of stage]*: I'm going to have a tête-à-tête with the heiress now.

[Ichabod follows Katrina through right door, smoothing his hair and pulling his tie into place as he goes. By the time the last guest has departed Ichabod returns crestfallen. He picks up his hat and stops in center of stage.]

ICHABOD: Oh, these women! these women!

[Exit.]

[CURTAIN]

Scene 3: Ichabod's Ride Home from the Quilting Frolic

[Stage Setting: Woodland. Ichabod enters, walking slowly and whistling dismally. A groan sounds. Ghostly noises are heard from off the stage. Ichabod discovers shadow near back of stage.]

ICHABOD *[stammering]*: Who are you? . . . Who are you? . . . Who are you?

[Headless Horseman steps out from behind curtain. Ichabod starts to run. Horseman throws pumpkin at him. Ichabod falls; rises immediately and runs off the stage in direction of his horse's shadow; he mounts his horse (steps over it) and moves away hurriedly. Horseman exits in direction of his horse's shadow and likewise moves away hurriedly.]

[CURTAIN]

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Scene 4: At Church Two Years Later

[*Stage Setting: Same as in Scene 3, with a fence toward back. People walk on stage as though they were leaving church. They stop at the church-yard gate in groups, and begin talking.*]

FIRST FARMER: That was a good sermon the parson preached this sabbath morning.

SECOND FARMER: Hans, did you have a profitable time in New York?

THIRD FARMER: Yes, and I saw Ichabod Crane alive—

FIRST FARMER: Sure 'nuf? It's been well nigh two years since he left these parts.

SECOND FARMER: Do you recollect how we found his horse without a saddle, and with the bridle under his feet at Ichabod's gate the morning after the Van Tassel quilting party?

FOURTH FARMER: Warn't that just a short spell before you married Katrina, Brom Bones?

SECOND FARMER: Well, what's Ichabod doin' now?

THIRD FARMER: He changed his quarters to a distant part of the country; kept school and studied law at the same time; was admitted to the bar; turned politician; electioneered; wrote for the papers; and finally was made a justice of the Ten Pound Court.

AN OLD LADY: I still firmly believe that Ichabod was spirited away by supernatural powers.

[*Brom Bones laughs uproariously.*]

FOURTH FARMER: Brom Bones, I suspect you know more about this matter than you ever tell.

[*Everyone gazes at Brom Bones.*]

[CURTAIN]

Criticism. At the beginning of the Story Conference the day following the presentation of *The Legend of Sleepy Hollow*, Eleanor burst out with, "Oh, did you know what Mr. Jones said? He told Mary that he thought our play was the best one he had ever seen."

"Eleanor, you surely did look pretty," said Kate. "And didn't Joe make a good Ichabod?"

"Yes, but I was afraid he was going to forget his lines in that first scene," replied Jimmy.

"I would have forgotten once if Spencer hadn't prompted me," Joe admitted. "I bet the next play I'm in I'll know my part better."

"You certainly can black up like a good nigger, Spencer. I thought I would surely die laughing when you first came out." Mary giggled at the very memory of Spencer.

"Edith, where did you get those darling wooden shoes?" inquired Elizabeth. "They were the prettiest things I ever saw."

"Oh, they belong to my grandmother," replied Edith. "She brought them from France."

"Say, but Mary's idea of representing the horses did work fine," remarked Edith. "I could just see the Headless Horseman chasing Ichabod."

"I don't see hardly how we could improve our play," said May. "It surely did carry out the main ideas of the story. Everybody I have talked to has not had one word of criticism to offer. It must have been a dandy."

"I think," replied Fred, "that we ought to have included a scene representing Ichabod caring for the babies in his patron's homes. My mamma asked me why we omitted that."

"That would have been funny," added Mary. "Really, I hadn't thought of it. Say, but we also could have shown the mothers spinning and making clothing. I'm so sorry we omitted that part."

"We could have called the scene: Ichabod Boarding with His Patrons," suggested Carolyn. "We could have represented Ichabod doing home chores for board and lodging."

"Yes, and we could have represented home life in those times," added Kenneth. "We could have shown the big fireplace with its mantel, rifle, powder horn, and candles. Long strings of corn and other vegetables could have been shown on the walls. Say, but wouldn't that have been interesting!"

"It surely would," replied May. "We could have represented the actors in the scene something like this: The mother could have been at one corner of the big fireplace spinning; the father in the other smoking a big corn cob pipe. Ichabod could have been

rocking the baby in front of the fireplace, while the other children were playing with the dog and kitten beside him."

"Say, May, you have omitted something," exclaimed Joe. "Why not have the father popping corn in the big fireplace? You know they usually did in those times. Mamma has an old-fashioned popper I could have borrowed, I'm sure."

"We could have lighted the room with old-fashioned candles," added Jack. "My grandma has three big ones that her father used when she was a little girl. They are big brass ones. I'm sure I could have borrowed them, although she thinks the world of them."

"Well, the next time we give this play I'm in favor of adding this scene," remarked Mary. "I believe Fred's mother was right."

"It would have been a good scene for the first one," added Kenneth. "I'm in favor of adding it."

"If I had to pick out the most interesting part of our play, I'd say it was the square dance," remarked Jack to Eleanor. "I'll never forget the negro musician yelling, 'Ladies to the right, gents to the left; swing your partners once and half-way round; balance all. . . .' Dad said he thought it was fine."

"Children, I think you did just fine," remarked the teacher approvingly. "You knew your parts well for the most part and acted them out very skillfully. Really, I enjoyed it immensely. Of course, we can improve it the next time we give it."

"Do you think we ought to add the scene suggested by Fred?" inquired Mary.

"I'm sure it would add a richer setting to the play," replied the teacher. "It would bring out exceedingly well the ideas suggested by Kenneth, and in so doing open up a new channel for our imagination which is the very life of a play. Although, I thought the play was exceedingly good as given."

"I'd like to tell my story next," said Jack. "I've a dandy."

"What is it?" exclaimed Eleanor. "I'd like to tell my story next."

"Tom Sawyer," replied Jack. "What's yours?"

"The Courtship of Miles Standish," retorted Eleanor. "It's interesting."

"Jack, we'll have to consider your story to-morrow at this time since our hour is up," suggested the teacher.

"All right," replied Jack.

"We'll consider mine, too?" asked Eleanor.

"Surely," replied the teacher.

The Program. Following is a copy of the program as formulated and sent to each home in the community by the committee selected for this purpose.

COMMUNITY MEETING PROGRAM

At the Experimental School

Wednesday Evening at 7

PROGRAM OF ACTIVITIES

1. Instrumental Music — School Orchestra
2. Old Virginia — School Glee Club
3. Dramatization — The Legend of Sleepy Hollow
4. The Old Oaken Bucket — School Glee Club
5. Refreshments and Phonograph Music

COME OUT AND ENJOY THE EVENING WITH YOUR
FRIENDS

UNDER DIRECTION OF THE THIRD GROUP

EXPERIMENTAL SCHOOL

2. Associated projects. In dramatizing *The Legend of Sleepy Hollow* the following associated projects were suggested and worked out by the pupils of this group.

1. Baking an angel cake.
2. How to engage in square dancing.
3. A study of Dutch costumes and customs.
4. How the Dutch lived in colonial times.
5. How schools were conducted in colonial days.
6. The story of the life of Washington Irving.

3. References used by pupils in this project. The following

books proved very helpful in working out the dramatization of *The Legend of Sleepy Hollow*:

Irving — *The Legend of Sleepy Hollow* (any standard school classic).

Mace — *A School History of the United States*, pp. 30-51.

Johnson — *Old Time Schools and Books*.

Tomlinson — *Colonial Boys*.

Bass — *Stories of Pioneer Life*.

Bates and Orr — *Pageants and Pageantry*, p. 30.

Fry — *Educational Dramatics*, p. 32.

Fisk — *Our Early Dutch Settlers*.

4. Other stories dramatized. In similar fashion the following stories were dramatized by this group during the four years the Experimental School was in operation:

1. The Husking Bee (original).
2. The First Thanksgiving (original).
3. The Progress of Farm Life (original).
4. Grandmother's Housekeeping (original).
5. Our School, Past and Present (original).
6. Rip Van Winkle (adapted).
7. The Courtship of Miles Standish (adapted).
8. The Talisman (adapted).
9. The First Settlers in Our District (original).
10. The Old Curiosity Shop (adapted).
11. The Old Oaken Bucket.
12. The Shepherd of the Hills (adapted).
13. Grandmother's Spinning Wheel (original).
14. The Making of the First Play.
15. The Legend of Sleepy Hollow (adapted).
16. Armistice Day Pageant.
17. Christmas Day Pageant.
18. Washington Day Pageant.
19. Lincoln Day Pageant.
20. Thanksgiving Day Pageant.
21. The Masque of Pandora.
22. Easter Day Pageant.



DRAMATIZING THE STORY OF LINCOLN'S BOYHOOD

V. STORY PROJECTS

1. The Projects of the First Group

Oral Stories

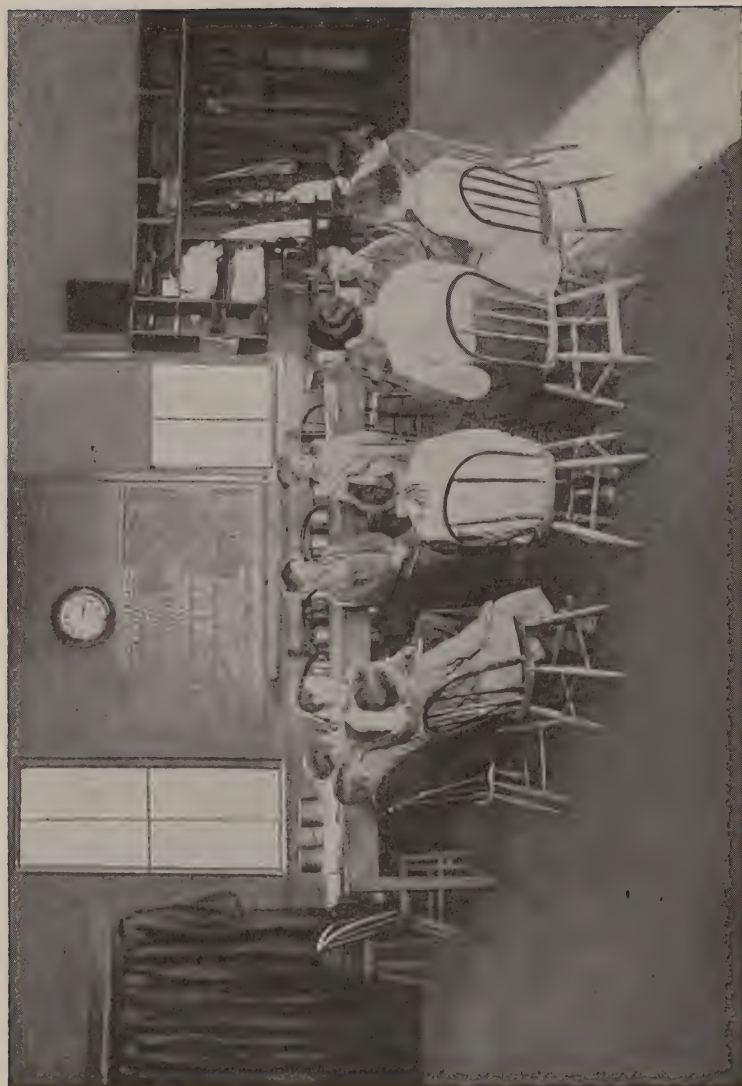
1. **Selecting story-telling.** In discussing, near the close of one of the story conferences, what they would like to engage in at the next meeting, Neva suggested story-telling. She said that she had found a very funny story that she would like to tell. Carl inquired of Neva the title of her story. She replied that it was called the "Gingerbread Boy." Onal suggested that he would like to look at the Bird Pictures (lantern slides). He said that when coming to school that morning he had seen two birds that he could not identify. He thought that he might be able to find out their names if he could see the Bird Pictures. Christene remarked that she had never read the "Gingerbread Boy" story and that she would like to have Neva tell it. She thought that they might look at the Bird Pictures at a later conference. Jeff stated that he didn't have a story ready to tell but that he could easily prepare one. He said that he would like to hear the "Gingerbread Boy" story. He asked Neva where she found it. He remarked that he thought he had read almost all of the story books and had not found any such story. Neva stated that she found the story in the Second Book of the story books called *Progressive Road to Reading* that had been ordered recently for the library. Carl said that he had read one of these new books through at home last night and had found three very interesting stories: "Jack and the Beanstalk," "The Lion and the Mouse," and "The Three Bears." He remarked that he would be glad to tell these stories if the other pupils would like to hear them. Iona stated that she believed she had found a new story. She said that it was called "How Old Mr. Toad Won His Race." Jeff wanted to know if it was like the phonograph story by the same name. Iona replied that she thought that it was. Carl stated that he believed that if the teacher would put the question to the pupils most of them

would favor story-telling. The teacher remarked that she thought the new stories that had been suggested were very interesting and she, for one, would like to hear them. She wanted to know how many favored story-telling. More than a majority voted to tell stories at the next group conference. The teacher then suggested that each pupil select and prepare what he considered an interesting story to tell at this next meeting.

2. Preparing the stories. The pupils selected from the library books and prepared what they considered interesting stories. In this connection they had the assistance of the Story Index (described on a succeeding page) and of the teacher who oftentimes was consulted regarding stories. The pupils soon discovered in this connection that they must exercise much care in the selection and preparation of stories if they wished to have a good audience when telling them. The stories selected and prepared by the pupils are as follows:

1. The Gingerbread Boy — Neva.
2. Jack and the Beanstalk — Carl.
3. How Old Mr. Toad Won His Race — Iona.
4. The Three Bears — Jeff.
5. The Little Red Hen — Christene.
6. The Crow and the Pitcher — Virgil.
7. The Old Woman and Her Pig — Allie.
8. Little Black Sambo — Gladys.
9. The Three Wishes — Lucile.
10. The Three Pigs — Coy.
11. The Four Musicians — Kenneth.
12. The Country Mouse and the City Mouse — Thelma.
13. The Fox and the Crow — Mary.

3. Telling the stories. Carl immediately suggested that Neva tell her story first. He said that he had read the story since Neva had mentioned it at the last meeting and considered it one of the most interesting stories that he had ever read. Iona remarked that she would like to hear the "Gingerbread Boy" story, since it



ENJOYING NEVA'S "GINGERBREAD BOY" STORY

was a new story that she had not heard. Neva said that she would be glad to tell her story first if the other pupils wanted her to do so. The pupils replied that they did. Neva proceeded to tell the "Gingerbread Boy" story. She told it very interestingly and effectively, expressing various phases of it in dramatic fashion. The pupils applauded her loudly and after discussing various parts of the story they pronounced it one of the best that they had ever heard.

Neva remarked, after finishing her story, that she would like to hear Iona's story next. Virgil wanted to know what Iona's story was about. Iona replied that it was a story about "How Old Mr. Toad Won His Race." The teacher asked how many would like to hear Iona's story next. More than a majority favored Neva's suggestion. Iona then proceeded to tell her story, receiving at the end hearty applause from the other children.

Jeff thought that the pupils would like to hear Carl's story. He said that it was about "Jack and the Beanstalk" and that he considered it as good as the "Gingerbread Boy" story. Coy remarked that if Carl's story was as good as the "Gingerbread Boy" story he certainly would like to hear it. Iona thought that it was equally as good. Carl said that he would be glad to tell his story if the other pupils wanted to hear it next. They signified that Carl should proceed with the story. Carl told it very effectively, acting out various parts. His story was pronounced, in a discussion which followed, an equal to Neva's story. In this fashion the following stories were told by the pupils during the conference period:

1. The Gingerbread Boy — Neva.
2. How Old Mr. Toad Won His Race — Iona.
3. Jack and the Beanstalk — Carl.
4. The Three Bears — Jeff.
5. The Old Woman and Her Pig — Allie.
6. The Four Musicians — Kenneth.

4. **Stories told.** In similar fashion the pupils of this group selected and told the following stories¹ during the four years that the Experimental School was in operation:

1. Little Red Riding Hood.
2. The House That Jack Built.
3. The Hare and the Tortoise.
4. The Crow and the Pitcher.
5. The Lion and the Mouse.
6. The Little Red Hen.
7. The Cunning Little Squirrel.
8. The Wicked Old Pixie.
9. Old Woman and Her Pig.
10. Little Black Sambo.
11. The Gingerbread Boy.
12. Chicken Little.
13. The Fox and the Grapes.
14. The Fox and the Cat.
15. Little Jack Horner.
16. Little Boy Blue.
17. Old Mother Hubbard.
18. Jack and Jill.
19. Humpty Dumpty.
20. Mistress Mary.
21. Little Bo-Peep.
22. Little Miss Muffet.
23. The Cow.
24. Little Birdie.
25. The Little Leaves.
26. Baa, Baa, Black Sheep.
27. The Four Musicians.
28. Ten Little Indians.
29. The Boy That Cried Wolf.
30. The Three Christmas Trees.
31. The Three Wishes.

¹The sources of most of these stories will be familiar to elementary teachers and for this reason it has seemed unwise to restrict teachers to specific titles as sole sources for any of these stories.

32. The Hare and the Hedgehog.
33. Grandmother's Graduation.
34. How Old Mr. Toad Won His Race.
35. The Country Mouse and the City Mouse.
36. The Three Pigs.
37. Lambkin Who Went to Granny's.
38. The Three Billy Goats Gruff.
39. The Dog and His Shadow.
40. The Elves and the Shoemaker.
41. The Baby Show.
42. The Mother Goose Show.
43. The Pancake.
44. Goats in the Rye Field.
45. Epaminondas and His Auntie.
46. Hansel and Gretel.
47. The Wise Men of Gotham.
48. The Monkey and the Cat.
49. Lady Moon.
50. The Kid and the Wolf.
51. The Fox and the Goat.
52. The Ant and the Grasshopper.
53. The Fox and the Stork.
54. The Wolf and the Lamb.
55. The Dandelion.
56. The Mice in Council.
57. The Tar Baby.
58. The Wolf and the Goat.
59. The Ant and the Dove.
60. The Wind and the Sun.
61. The North Wind.
62. The Ox and the Frog.
63. The Fox and the Crow.
64. The Shepherd's Boy.
65. The Mouse, the Frog, and the Hawk.
66. The Cat and the Birds.
67. The Baby.
68. The Dog in the Manger.
69. Little Half Chick.

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70. The Mouse, the Cat, and the Cock.
71. The Fox Who Had Lost His Tail.
72. Four Friends.
73. The Honest Woodcutter.
74. Mistress Mary Gives a Garden Party.
75. The Pine Tree.
76. The House in the Woods.
77. Snow White and Rose Red.
78. King Midas and the Golden Touch.
79. Sleeping Beauty.
80. Snow White and the Seven Dwarfs.
81. Pussy-Cat.
82. The North Wind Doth Blow.
83. Baby-Land.
84. The Crows and the Windmill.
85. Little Workmen.
86. The Hurt Sparrow.
87. The Nightingale and the Frogs.
88. Bees.
89. One Little Mouse.
90. Bobby and the Earthworm.
91. The Cat That Wanted to Dance.
92. The Chickadee's Song.
93. The Seed.
94. Spring.
95. Who Stole the Bird's Nest?
96. The Fox That Played Herdsman.
97. The Wee Man and the Huge Cow.
98. Goldilocks and the Three Bears.
99. The Quarrelsome Kittens.
100. See, Saw, Up and Down.
101. The Pine Tree That Wanted New Leaves.
102. Peter, Peter, Pumpkin Eater.
103. Cock Robin.
104. Three Little Kittens.
105. The Goats in the Turnip Field.
106. Mix a Pancake.
107. The Postman.

108. The Little Bird in the Birch Tree.
109. This Little Pig Went to Market.
110. The Boy and the Blacksmith.
111. Two Blackbirds.
112. Redbreast in the Cherry Tree.
113. Long Time Ago.
114. If All the World Were an Apple Pie.
115. Rock-a-bye, Baby.
116. Good Night.
117. The Sparrow and the Crow.
118. The Furious Lion.
119. The Jackal and the Crocodile.
120. The Geese.
121. The Quartette of Birdies.
122. The Cuckoo and the Eagle.
123. The Eagle and the Mole.
124. The Mule and the Lion.
125. The Glowworm and the Daw.
126. The Lion and the Goat.
127. The Bee and the Spider.
128. The Hen and the Cat.
129. How the Hare's Friends Deserted Her.
130. The Elephant Has a Bet with the Tiger.
131. The King Crow and the Water Snail.
132. Father Lime Stick and the Flower Pecker.
133. Who Killed the Otter's Babies?
134. The Shepherd and the Nightingale.
135. The Farmer and the Ghost.
136. Æsop and the Donkey.
137. The Peacock and the Fox.
138. The Robbers and the Farmer.
139. How an Evil King Was Changed into a Good One.
140. How the Fox Lost His Meat.
141. The Partridge and the Crow.
142. The Ungrateful Adder.
143. The Apes and the Popinjay.
144. The Rhine Maidens.
145. Naomi and Ruth.

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146. How the Tiger Was Caught.
147. The Oak and the Reed.
148. The Fox and the Stork.
149. The Shepherd Wolf.
150. The Crocodile.
151. The Gnat and the Bee.
152. The Eagle and the Owl.
153. The Ant and the Caterpillar.
154. In Bad Company.
155. The Silly Peacock.
156. The Stag.
157. The Snake.
158. The Quarreling Tiger and Lion.
159. The Mocking-Bird.
160. The Soldier's Horse.
161. The Drummer Girl.
162. The Complainers.
163. St. Valentine's House.
164. The First May Baskets.
165. A Little Patriot.
166. The Christmas Jest.
167. Hans and Brownie.
168. The Big Red Apple.
169. How Patty Gave Thanks.
170. The Pig Brother.
171. Willie Winkie.
172. Christmas in the Barn.
173. The Christmas Stocking.
174. The Cookie Boy.
175. Spot's Kittens.
176. How Cedric Became a Knight.
177. The Wind's Work.
178. The North Wind at Play.
179. Peter Rabbit.
180. The Easter Rabbit.
181. The Story of Speckle.
182. How the Robin Got its Red Breast.
183. The Oriole's Nest.

184. How the Elephant Got His Trunk.
185. Why We Have Pink Roses.
186. Robin and the Pussy Cat.
187. Kris Kringle.
188. Snow Flakes.
189. A Tiny Seed.
190. What Does the Little Birdie Say?
191. Over in the Meadow.
192. What Brown Pussy Saw.
193. Apple Blossoms.
194. A Little Boy's Walk.
195. Golden Rod and Aster.
196. The Sleeping Apple.
197. Hans Who Made the Princess Laugh.
198. The Great Feast.
199. Why the Oak Leaves Have Notches.
200. Pandora.
201. The Discontented Pine Tree.
202. The Loving Cup.
203. Why the Bear Is Stumpy Tailed.
204. How Fire Came to Man.
205. Philip's Valentine.
206. Dick Whittington and His Cat.
207. Hans and the Four Big Giants.
208. Why the Woodpecker's Head Is Red.
209. The Pea Blossom.
210. Why the Morning Glory Climbs.
211. Golden Rod.
212. A Good Play.
213. October's Party.
214. Thanksgiving.
215. Santa Claus and the Mouse.
216. A Real Santa Claus.
217. The Ride to Bumpville.
218. The Naughty Doll.
219. Three Little Sisters.
220. How the Violets Came.
221. Rainbow Fairies.

222. The Elf's Umbrella.
223. How Do Robins Build Their Nests?
224. The Dewdrop.
225. The Brown Thrush.
226. The Discontented Buttercup.
227. Daisies.
228. Boots and His Brothers.
229. The Cat, the Monkey, and the Chestnut.
230. Why the Rabbit's Tail is Short.
231. Little Pumpkin's Thanksgiving.
232. The Barmecide Feast.
233. Miss Muffet's Christmas Party.
234. Why the Evergreen Trees Keep Their Leaves.
235. The Golden Cobwebs.
236. The Shepherd Lad Who Became King.
237. Kind Alfred and the Cakes.
238. Why the Sea Is Salt.
239. How Buttercups Came.
240. The Fairy's Tablecloth.
241. How the Leaves Came Down.
242. A Good Thanksgiving.
243. Seeing Things at Night.
244. Dear Old December.
245. A Visit from St. Nicholas.
246. A Wonderful Weaver.
247. The Merry Brown Thrush.
248. The Voice of the Grass.
249. Pussy Willow.
250. Marjorie Almanac.
251. The Violet.
252. Little Orphant Annie.
253. Evening at the Farm.
254. Why Mr. Billy Goat's Tail is Short.
255. Daddy Jake, the Runaway.
256. The Camel and the Jackal.
257. The Old Woman and Her Company.
258. The Little Jackal and the Lion.

259. The Ugly Duckling.
260. The Cock and the Fox.
261. The Fisherman and His Wife.
262. The Giant of Band-Beggars Hall.
263. The Cat and His Servant.
264. The Two Sisters.
265. The Pied Piper.
266. The Twelve Months.
267. How the Camel Got His Hump.
268. The Owl and the Pussy Cat.
269. The Hen and the Bag of Flour.
270. The Rat, the Hen, the Pig, and the Duck.
271. The Lark, the Cat, and the Snake.
272. The Rat and the King.
273. The Sky Is Falling.
274. Gray Cat and Black Cat.
275. The Hungry Fox.
276. The House That Jack Built.
277. The Wolf and the Three Little Cats.
278. The Wolf, the Fox, and the Horse.
279. Jack and the Old Man.
280. Little Half-chick and the Bags of Gold.
281. The Bull, the Jackal, and the Lion.
282. The Crane and the Crab.
283. Jack and the Giant of a Hundred Hills.
284. The Deer, the Crow, and the Jackal.
285. The Holy Man and the Three Robbers.
286. Dicky Dare.
287. The Sheep, the Pig, the Cow, and the Goose.
288. The Bear.
289. The Kitten Who Forgot.
290. The Three Little Kittens.
291. The Cat and the Mouse.
292. The Little Pigeon.
293. The Little Gray Pony.
294. The Magic Apples.
295. The Great Kettle.

Song Stories

1. **Selecting singing.** At one of the story conferences, Carl stated that he would like to spend the period in singing songs. He said that he had heard the Second Group singing "The Cobbler." He remarked that the song told the story about an old man mending shoes. He thought that the story was very pretty and he would like to learn how to sing it. Iona said that she would like spending the period singing songs, as she would like to learn how to sing "Bobwhite." She remarked that this song required some whistling and that she was not quite sure whether she could whistle. Jeff wanted to know what part of the song had to be whistled. Iona replied that the words "Bobwhite, Bobwhite" had to be whistled. Jeff thought that it would be an easy matter to whistle "Bobwhite" like a quail and proceeded to show Iona how to whistle those words. Neva said that she liked "Jolly Old Saint Nicholas" much better than any of the songs suggested. She remarked that it was a story about Old Santa Claus. The teacher at this point wanted to know how many favored spending the period singing songs. Almost all of the pupils favored singing.

2. **Singing songs.** After distributing the song books, Jeff suggested that they sing "Bobwhite" first. He said that it told the story of a little quail and he thought the whistling made the song very beautiful. Carl favored singing "The Cobbler" first. He said that he thought the story of "The Cobbler" was much prettier than the story of "Bobwhite." The teacher wanted to know how many favored the songs suggested. More than a majority favored Jeff's suggestion and as a consequence the group sang "Bobwhite" first. In like fashion the pupils spent the period in singing the following songs:

1. The Cobbler.
2. Three Blind Mice.
3. Old Black Joe.
4. Jolly Old Saint Nicholas.
5. Bobwhite.



ENJOYING THE SONG "COMIN' THROUGH THE RYE"

3. Songs selected and learned. In similar manner the following songs were selected and learned by the pupils of this group during the operation of the Experimental School.

1. My Bonnie.
2. Missouri.
3. America.
4. Row, Row, Row Your Boat.
5. Hickory, Dickory Dock.
6. Baa, Baa, Black Sheep.
7. London Bridge.
8. Three Blind Mice.
9. Ten Little Indians.
10. Little Boy Blue.
11. A Dewdrop.
12. Morning Glory.
13. Good Morning.
14. Morning Greeting.
15. The Raindrops.
16. Good Morning, New Day.
17. Little Jack Horner.
18. How Many Miles to Babylon?
19. The Snowbird.
20. Mistress Mary.
21. Hey-Diddle-Diddle.
22. Tick-Tock.
23. Little Pussy Willow.
24. Little Gypsy Dandelion.
25. The Dairy Maids.
26. Jolly Farmer Boys and Girls.
27. Dancing Song.
28. Sleighing Song.
29. Santa's Sleigh Bells.
30. When Winter's Over.
31. The Woodpecker.
32. Is John Smith Within?
33. The Whippoorwill.
34. Swinging.

35. Church in the Wildwood.
36. Jesus, Lover of My Soul.
37. Rock of Ages.
38. Our Childhood Days.
39. Jack Frost.
40. Thanksgiving Time.
41. Merry the Lark.

Phonograph Stories

1. **Selecting phonograph stories.** Iona told the story, "How Old Mr. Toad Won His Race," at one of the story conferences. Jeff wanted to know when she had finished her story if they did not have a phonograph record for the story. The teacher replied that they had such a record. Jeff then remarked that he would like to hear the phonograph story of "How Old Mr. Toad Won His Race." Neva said that she would like to hear the "Bobwhite" song on the phonograph. She remarked that she thought the whistling part of the song was especially pretty and she would like to hear the phonograph whistle this part. Lucile immediately stated that she had the "Bobwhite" record at home and that she would be glad to bring it to school on the next day. Kenneth remarked that he never got tired of hearing "Old Black Joe" on the phonograph. Carl inquired if they had a record for the "Peter Rabbit" story. He said that he had read the story to his mother the night before and she thought there was a record made for the story. Carl stated that he would like to hear the "Peter Rabbit" story on the phonograph. The teacher said that she would like to suggest that they spend the next conference period listening to the phonograph stories that had been suggested. She thought that they would not have time enough at that period to listen to all of the records that had been mentioned. The pupils approved the teacher's suggestion.

2. **Listening to phonograph stories.** At the next conference, Jeff was first to suggest that the phonograph story, "How Old Mr. Toad Won His Race," be played first. Neva thought that



ENJOYING THE STORY OF "HOW OLD MR. TOAD WON HIS RACE" ON THE PHONOGRAPH

they might begin by playing any one of the records, as she felt they would have time to hear all of them. The teacher then inquired how many favored hearing the record suggested first. Practically all of the pupils approved Jeff's suggestion. The pupils listened first to "How Old Mr. Toad Won His Race." In like fashion, the pupils selected and listened to the following records during the period:

1. Peter Rabbit.
2. Old Black Joe.
3. The Pig Brother.
4. The Gingerbread Boy.
5. My Bonnie.

3. Phonograph stories selected. In similar fashion the pupils of this group selected and listened to the following phonograph stories during the operation of the Experimental School:

1. Hickory, Dickory Dock.
2. Baa, Baa, Black Sheep.
3. London Bridge.
4. Three Blind Mice.
5. Ten Little Indians.
6. Little Boy Blue.
7. America.
8. Red, White, and Blue.
9. The Teaching of Reddy Fox.
10. Seven Pretty Girls.
11. Little Joe Otter Tries to Get Even.
12. Dance Greeting.
13. My Bonnie.
14. Humpty Dumpty.
15. Ten Crooked Men.
16. Sing a Song of Six Pence.
17. How Many Miles to Babylon?
18. Home Sweet Home.
19. I See You.
20. Songs of Our Native Birds.

21. The Cobbler.
22. Why Mr. Gobbler Changed His Tune.
23. Dixie.
24. My Old Kentucky Home.
25. The Wise Men of Gotham.
26. The Quartette of Birdies.
27. The Fox and the Stork.
28. Boots and His Brother.
29. Sambo and His Friends.
30. The Crow and the Pitcher.
31. The Fox and the Crow.
32. Old Woman and Her Pig.
33. Little Jack Horner.
34. The Three Pigs.
35. The Four Musicians.
36. The Elves and the Shoemaker.
37. The Monkey and the Cat.

Picture Stories

1. Selecting the Bird Pictures. In discussing at one of the story conferences the activities that they would like to engage in at the next meeting of the group, Onal suggested that he would like to look at the Bird Pictures (lantern slides). He said that when coming to school that morning he had seen two birds that he could not identify. He thought that he might be able to find out their names if he could see the pictures. More than a majority of the pupils, however, favored story-telling for the next conference. At a later meeting, Onal again suggested the Bird Pictures. This time he had the support of other pupils. Kenneth stated that he had seen a big black bird that morning which resembled the crow somewhat but was much smaller. He wanted to know if anyone knew the name of the bird. Carl remarked that he had seen the picture of such a bird but that he had forgotten its name. Neva suggested that they spend the period in looking at the pretty birds. She remarked that she never got tired of looking at them. Iona said that she would prefer looking at the Flower Pictures,

since they were studying the wild flowers of the community. Jeff inquired if anyone knew the difference between the male and female jay. Onal remarked that Jeff would be able to find out the difference between these birds if they should look at the Bird Pictures. Christene remarked that she had seen the pictures twice, but she was like Neva in that she never got tired of looking at the pretty birds. She said that she favored looking at the Bird Pictures. Jeff remarked that he would like to operate the lantern. Onal said that he believed that a majority of the pupils favored his suggestion this time. The teacher wanted to know if Onal was right. Practically all of the pupils voted in favor of spending the period in looking at the Bird Pictures.

2. Looking at the Bird Pictures. The pupils spent the period in looking at and discussing the different kinds of birds, largely for the sake of the fun that they got from, using Neva's expression, "looking at the pretty birds." Incidentally Onal found out the names of his two birds — russet-backed thrush and myrtle warbler. Kenneth discovered that his bird was the crow blackbird. Jeff found out that the male jay was darker blue in color and somewhat larger in size than the female jay.

3. Pictures selected. In similar fashion, the pupils of this group selected and observed the following pictures during the period that the Experimental School was in operation:

1. Our Wild Animals (lantern).
2. Our Yard Flowers (lantern).
3. Our Wild Flowers (lantern).
4. Our Big Trees (stereograph).
5. Our Poultry (lantern).
6. Our Pets (lantern).
7. Christmas in Other Lands (stereograph).
8. Gardening (lantern).
9. Our Animal Helpers (stereograph).
10. Making Wheat Flour (lantern).
11. Homes of Children in Other Lands (stereograph).
12. How People Travel in Other Lands (stereograph).

13. Our Dairy Cows (lantern).
14. Wild Animals of Other Lands (stereograph).
15. Life in Cold Lands (stereograph).
16. Life in Hot Lands (stereograph).
17. Our Pigs (stereograph),
18. Our Insects (stereograph).
19. Our National Parks (lantern).
20. Life in the Highlands (stereograph).
21. Life in the Lowlands (stereograph).
22. Schools in Other Lands (stereograph).
23. Our Big Ships (stereograph).

Piano Stories

1. **Selecting piano stories.** After singing "The Church in the Wildwood" at one of the story conferences Thelma asked Iona to play it on the piano. She remarked that she knew that Iona could, as she had heard her play it at Sunday School. Lucile, in this connection, stated that she thought that the story of "The Church in the Wildwood" was very pretty and her mother had told her that it described very well the little church that she had attended when she was a little girl. She wondered how it would sound on the piano. Jeff inquired of Iona if she could play "Old Black Joe." He remarked that he thought the story of "Old Black Joe" was much better than the story of "The Church in the Wildwood." Iona replied that she couldn't play "Old Black Joe" very well, but she could get Jewell (Third Group pupil) to play it for them. The teacher remarked at this point that she thought that the stories of the songs suggested were very pretty and that she too would like to hear them played on the piano. She said that she didn't believe there was sufficient time left at that conference and suggested that they might listen to these song stories on the piano at the next meeting of the group. The pupils approved the teacher's suggestion. Iona remarked that she would ask Jewell to come to their next conference.

2. **Listening to piano stories.** At the next conference Thelma suggested that Iona play "The Church in the Wildwood" first.

Jeff said that he wanted Jewell to play "Old Black Joe." Neva wanted to know of Iona if she could play the "Three Blind Mice" story. Christene said that "My Bonnie" was her favorite song and that she knew Jewell could play it. The teacher wanted to know how many favored listening to Iona play "The Church in the Wildwood" first. More than a majority favored this song first, and Iona proceeded to play it on the piano, receiving hearty applause at the end. In like fashion, the pupils selected and listened to the following song stories played on the piano during the conference period:

1. Old Black Joe — Jewell.
2. The Three Blind Mice — Iona.
3. My Bonnie — Jewell.
4. Our Childhood Days — Iona.
5. Ten Little Indians — Jewell.
6. Good Morning — Iona.

3. Piano stories selected. In similar fashion during the operation of the Experimental School,¹ the following song stories were selected by this group and played on the piano for them by pupils of the Second and Third Groups:

1. Missouri.
2. America.
3. Row, Row, Row Your Boat.
4. Hickory, Dickory Dock.
5. London Bridge.
6. Morning Greeting.
7. Baa, Baa, Black Sheep.
8. The Raindrops.
9. Tick-Tock.
10. Jolly Farmer Boys and Girls.
11. Santa's Sleigh Bells.
12. When Winter's Over.

¹ Pupils of the Second and Third Groups played most of the song stories on the piano for the pupils of this group.

13. The Woodpecker.
14. Jesus, Lover of My Soul.
15. Jack Frost.
16. Thanksgiving Time.
17. Bobolink.
18. Come and Go a-Maying.
19. Happy Farmer Boy.
20. My Lady Sleeps.
21. Merry Sings the Lark.
22. Merrily the Cuckoo.
23. My Kitty.
24. Sliding down the Hill.
25. The Sleigh Ride.
26. The Song of the Ducks.
27. The Flowers That Will Come in May.
28. The Whistling Farmer Boy.
29. Bobwhite.
30. The Happy School Boy.
31. When the Green Leaves Come Again.
32. Auld Lang Syne.
33. Old Folks at Home.
34. My Old Kentucky Home.
35. Old Oaken Bucket.
36. When Johnny Comes Marching Home.
37. Old Santa Claus.
38. Jolly Old Saint Nicholas.
39. The Snowbird.

The Story Index

The school library contained many different kinds of story books. The pupils, as well as the teacher, lost much time in searching through these books for stories. Ralph, a pupil of the Third Group, suggested one day in his group that if each pupil would make some sort of a record of the stories that he had selected this would assist other pupils in finding stories. This suggestion was approved by his group as well as by the other two groups of pupils. The form of the record was discussed by all

the pupils one day in conference. They agreed on a card index system as the best means for recording stories. In this connection they decided to make a small cabinet of drawers — one for each group — for filing these cards. The cabinet was known in school as the Story Index. Pupils of each group filled in, themselves, one of the cards for every story selected and told in school. This index of stories saved much time in finding stories, since each pupil could find from it not only the names of various stories in the library but the book containing each story and could in addition get in a few minutes an idea of what the story is about.

The following card is a record of Carl's story, pupil of the First Group, and illustrates how the cards were filled in by the pupils:

STORY INDEX CARD

1. *Name of story.* "The Gingerbread Boy."
2. *Author.* Burchill, Ettinger, and Shimer.
3. *Where the story is found.* Progressive Road to Reading, Book One, p. 9. No. 9. Shelf 7.
4. *What the story is about.* "The Gingerbread Boy" is a story about a little boy and girl making a gingerbread boy. The little girl made him and put him in the oven to cook. The little boy put a candy coat and hat on him. When he was cooked he ran and ran. Not anyone was able to catch him. He grew so soft after floating in the water running away from a swan that he never said anything more. He was a funny little boy.
5. *Name of pupil.* Carl Carden.
6. *School Group.* Group One.

The Entertainment Program

The pupils of each group prepared in connection with their story work entertainment programs from time to time. The following is an exact copy of an entertainment program prepared

and given by the pupils of this group at one of the night community meetings. The pupils prepared artistic programs and sent one to each home of the community.

COMMUNITY MEETING PROGRAM

At the Experimental School

Wednesday Evening — 8:30

PROGRAM OF ACTIVITIES

Phonograph Music and Community Singing (Onal)

Folk Dance: Ride a Cockhorse (First Group)

Stories: The Gingerbread Boy (Neva)

The Golden Fleece (Jeff)

Old Woman and Her Pig (Eva)

The Elves and the Shoemaker (Coy)

Why the Woodpecker's Head is Red (Gladys)

Why the Rabbit's Tail is Short (Virgil)

Songs: Jolly Farmer Boys and Girls (First Group)

Missouri (First Group)

Pictures: Lantern Slides: Our Wild Flowers (Jeff)

Song: Good Night, Ladies (First Group)

Refreshments: Cocoa and Cookies (First Group)

WE SHALL BE DELIGHTED TO SEE YOU AT THIS MEETING. COME.

(Under direction of First Group)

2. The Projects of the Second Group

The projects engaged in by the pupils of this group were similar to those of the First Group, only more extended. They continued to read, discuss, and tell stories; sing songs; listen to phonograph and piano stories; and observe pictures for the sake of the fun that these projects afforded. The following story projects were selected and engaged in by the pupils of this group during the operation of the Experimental School.

*Oral Stories*¹

1. How Thor Found His Hammer.
2. The Story of Troy.
3. Jason and the Golden Fleece.
4. Christmas at the Cratchits.
5. The First Christmas.
6. The Christmas Truants.
7. The Goose Girl.
8. Hansel and Gretel.
9. The Flying Dutchman.
10. The Seven Ravens.
11. William Tell.
12. King Arthur and His Sword.
13. The Boys, the Bees, and the British.
14. The Story of Ruth.
15. How the Fairies Came to America.
16. Billy Beg and His Bull.
17. Emmy Lou's Spelling Match.
18. Grandmother's Stories.
19. Horatius at the Bridge.
20. The Pine Tree Shillings.
21. Bobwhite.
22. The Corn Song.
23. The Village Blacksmith.
24. The Mountain and the Squirrel.
25. The Circus Day Parade.
26. Why Mr. Billy Goat's Tail Is Short.
27. The Tar Baby.
28. Daddy Jake, the Runaway.
29. The Frost.
30. While the Shepherds Watched Their Flocks by Night.
31. Little Orphant Annie.
32. King Midas.
33. Rip Van Winkle.

¹ The sources of most of these stories will be familiar to elementary teachers and for this reason it has seemed unwise to restrict teachers to specific titles as sole sources for any of these stories.

34. Joan of Arc.
35. The Birds of Killingworth.
36. The Pied Piper of Hamelin.
37. The Miller of Dee.
38. King Solomon and the Ants.
39. The Story of Columbus.
40. The Story of Franklin.
41. The Story of Dolly Madison.
42. The Story of Lincoln.
43. The Town Musicians.
44. Robin Hood.
45. The Fox and the Grapes.
46. The House in the Woods.
47. The Fox and the Crow.
48. The Country Mouse and the City Mouse.
49. The Monkey and the Chestnuts.
50. St. Valentine's House.
51. Epaminondas.
52. Cinderella.
53. Sleeping Beauty.
54. Beauty and the Beast.
55. The Kid and the Wolf.
56. The Mice in Council.
57. The Mouse, the Frog, and the Hawk.
58. The Mouse, the Cat, and the Cock.
59. The Dog in the Manger.
60. Little Workmen.
61. The Fox That Played Herdsman.
62. The Goats in the Turnip Field.
63. The Quarrelsome Kittens.
64. Strange Lands.
65. The Eskimo Boy and His Home.
66. The Indian Boy and His Home.
67. The Story of the First Thanksgiving.
68. The Story of the First Decoration Day.
69. The Story of the Pilgrims.
70. The Lark and the Partner.
71. Hans the Eskimo.

72. The Three Wishes.
73. The Golden Touch.
74. Dick Whittington and His Cat.
75. The Elves and the Shoemaker.
76. The Golden Fleece.
77. Hiawatha's Childhood.
78. The Barefoot Boy — Whittier.
79. Evening at the Farm — Trowbridge.
80. The Huskers — Whittier.
81. Farmer Brown — Whittier.
82. Milking Time — Rossetti.
83. Autumn Leaves — Cooper.
84. The Haylofts — Stevenson.
85. Autumn Fires — Cooper.
86. The Flight of the Birds — Stedman.
87. Going a-Nutting — Stedman.
88. Song of the Brook — Tennyson.
89. Green Things Growing — Wiggins.
90. September — Sherman.
91. Little Brook — Riley.
92. To a Butterfly — Wordsworth.
93. The Brook — Tennyson.
94. The Planting of the Apple Tree — Bryant.
95. The Bee and the Flowers — Tennyson.
96. How the Leaves Came Down — Coolidge.
97. The Flight of the Birds — Stedman.
98. The Mountain and the Squirrel.
99. Autumn — Cary.
100. What the Winds Bring — Stedman.
101. Robin Redbreast — Allingham.
102. Adventures of a Brownie.
103. Alice in Wonderland.
104. Gulliver's Travels.
105. Through the Looking Glass.
106. King of the Golden River.
107. The Three Golden Apples.
108. Robinson Crusoe.
109. Swiss Family Robinson.

110. King Arthur and His Knights.
111. In the Days of the Giants.
112. Peter and Wendy.
113. Jungle Books — Kipling.
114. A Hunting of the Deer.
115. From Trail to Railway.
116. The Wireless Man.
117. How It Works.
118. Story of Patsy.
119. The Little Colonel.
120. The Boys of Rincorn Ranch.
121. The Raiders.
122. The Young Defenders.
123. Boyhood in Norway.
124. Five Little Strangers.
125. Home Life in Colonial Days.
126. Stories of Indian Days.
127. Two Girls in China.
128. Adrift on the Ice Pan.
129. Boy Heroes.
130. Boys of the Revolution.
131. Boys' Life of U. S. Grant.
132. Home Life in all Lands.
133. Billy Whiskers.
134. Mrs. Wiggs of the Cabbage Patch.
135. Black Beauty.
136. Daddy Takes Us to a Circus.
137. Girl of the Limberlost.
138. Anne of Green Gables.
139. Bunny Brown and His Sister Sue.
140. The Miraculous Pitcher.
141. Two Old Soldiers.
142. A Brave Rescue and a Rough Ride.
143. The Convict and the Good Bishop.
144. How a Cat Played Robinson Crusoe.
145. A Dairy Exploit.
146. The Yankee Boy.
147. Prospero and Miranda.

148. The Cavalier's Escape.
149. A Night Adventure during the Old French War.
150. Edith of Scotland.
151. The Soldier and the Panther.
152. Washington and the Spy.
153. The Two Lieutenants.
154. The Two Bottles.
155. The Fairies of the Caldon Low.
156. The Ram and the Pig.
157. The Boy Who Could Not Tell a Lie.
158. The Beggar Maid.
159. The Three Spinning Fairies.
160. The Two Millers.
161. The Village Blacksmith.
162. The Golden Touch.
163. Lady Daffadowndilly.
164. A Mad Tea Party.
165. Mary's Tea Party.
166. A Thanksgiving Story.
167. The Little Post Boy.
168. The Forty Thieves.
169. Jackanapes and the Pony.
170. Peter and the Bottle.
171. Laughing Dumpling.
172. King Alfred and the Cakes.
173. The Dreadful Visitor.
174. The Brahmin and the Tiger.
175. The Elf and the Dormouse.
176. The Story of Peter and His Brothers.
177. The Little Locomotive.
178. The Wonderful Travelers.
179. The City and the Bottom of the Sea.
180. What Mrs. Squirrel Thinks.
181. Peter Johnson's Boots.
182. A Visit from St. Nicholas.
183. Was It the Good Bear?
184. How Theodore Roosevelt Overcame His Handicap.
185. Pioneer Tales.

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186. Story of Daniel Boone.
187. The Wise Jackal.
188. The Foolish Jackal.
189. How the Chipmunk Got Its Stripes.
190. A Trick for Doing Good.
191. The Fish I Didn't Catch.
192. The Blind Man and the Elephant.
193. The Boyhood of Lincoln.
194. The Wonderful Lamp.
195. The Adventure of the Mason.
196. Thanksgiving at Todd's Farm.
197. The House by the Side of the Road.
198. The Old Clock on the Stairs.
199. The Pumpkin.
200. The Buffalo.
201. Grandfather's Chair.
202. The Courtship of Miles Standish (adapted).
203. The Legend of Sleepy Hollow (adapted).
204. The Celebrated Jumping Frog.
205. The Story of Washington.
206. The Story of Columbus.
207. The Story of Robert E. Lee.
208. Huckleberry Finn.
209. Tom Sawyer.

Song Stories

1. Jolly Farmer Boys and Girls.
2. Bobwhite.
3. Come and Go a-Maying.
4. Merry Farmer Boys and Girls.
5. Merry Sings the Lark.
6. Merrily the Cuckoo.
7. Sweet Summer's Gone Away.
8. The Whistling Farmer Boy.
9. The Old Farm Gate.
10. The Happy School Day.
11. The Brooklet.
12. Our Childhood Days.

13. America.
14. Missouri.
15. Star-Spangled Banner.
16. Annie Laurie.
17. Auld Lang Syne.
18. Battle Hymn of the Republic.
19. Dixie.
20. Flow Gently, Sweet Afton.
21. Home, Sweet Home.
22. My Old Kentucky Home.
23. Old Black Joe.
24. Old Folks at Home.
25. U. S. A. Forever.
26. Yankee Doodle.
27. The Old Oaken Bucket.
28. Nancy Lee.
29. Columbia, Gem of the Ocean.
30. Good Night, Ladies.
31. Jingle Bells.
32. Juanita.
33. Thanksgiving Song.
34. Blacksmith.
35. The Brownie.
36. Thanksgiving Hymn.
37. Autumn.
38. Song of a Loaf of Bread.
39. Coasting.
40. Skating.
41. Voices in the Woods.
42. Winding the Clock.
43. Sleighing Song.
44. The Kite.
45. What the Robin Told Me.
46. It Is Spring.
47. Rollicking Robin.
48. Easter Carol.
49. Little Green Frog.
50. The Strawberry Girl.

51. Dancing Song.
52. Santa Claus.
53. The Clock.
54. My Old Dan.
55. Onward, Christian Soldiers.
56. Nearer, My God, to Thee.
57. Jesus, Lover of My Soul.
58. Swedish Gymnastic Dance.
59. Bleking Dance.
60. English May Dance.
61. Italian Peasant Dance.
62. German Clap Dance.
63. The Little Shoemaker.
64. Rub-a-Dub-Dub.
65. Harvest of Squirrel and Honey Bee.
66. Tracks in Snow.
67. Rock of Ages.
68. My Mother's Bible.
69. The Church in the Wildwood.
70. When Johnny Comes Marching Home.
71. Jolly Old St. Nicholas.
72. Christmas Time Has Come Again.
73. Christmas Carol.
74. Christmas Song.

Phonograph Stories

1. When You and I Were Young, Maggie.
2. U. S. A. Forever.
3. Yankee Doodle.
4. Old Folks at Home.
5. Old Black Joe.
6. My Old Kentucky Home.
7. Home, Sweet Home.
8. Flow Gently Sweet Afton.
9. Dixie.
10. Battle Hymn of the Republic.
11. The Old Oaken Bucket.
12. Annie Laurie.

13. Star-Spangled Banner.
14. America.
15. Nancy Lee.
16. Columbia, Gem of the Ocean.
17. Potomac Bells.
18. Comin' through the Rye.
19. The Happy Farmer.
20. Bobwhite.
21. The Church in the Wildwood.
22. My Mother's Bible.
23. Thanksgiving Song.
24. Onward, Christian Soldiers.
25. Nearer, My God, to Thee.
26. Swedish Gymnastic Dance.
27. Bleking Dance.
28. English May Dance.
29. Italian Peasant Dance.
30. German Clap Dance.
31. Dancing Song.
32. Missouri.
33. Uncle Josh in a Cafeteria.
34. Uncle Josh and the Honey Bees.
35. The Peacocks.
36. Peter the Vagabond.
37. The Wild Irish Rose.
38. Serenade of Olden Times.
39. If I Forget.
40. I've Got My Habits.
41. Alice, Where Art Thou?
42. Chip of the Old Block.
43. Give a Man a Horse.
44. I Want My Mammy.
45. When the Corn Is Waving, Annie Dear.
46. I'm Laughing All the Time.
47. Sleep — Baby, Sleep.
48. Taming of the Shrew.
49. Granny.
50. Uncle Josh.

51. The Opera at Pumpkin Center.
52. Uncle Josh Buys an Automobile.
53. Shoemaker John.
54. The Owl.
55. Jones and the Hare.
56. On the Campus.
57. Ma and the Auto.
58. Shopping in the Burg.
59. Grandmaw and Grandpaw's Quarrel.

Picture Stories

1. The Cotton Industry (lantern).
2. The Lumber Industry (stereograph).
3. Coal Mining (stereograph).
4. The Dairy Industry (lantern).
5. The Poultry Farm (lantern).
6. Our Big Orchards (stereograph).
7. Making Flour (stereograph).
8. Uncle Sam's Mail (stereograph).
9. The Western Ranch (stereograph).
10. Tractor Farming (stereograph).
11. Our Corn (lantern).
12. Wheat Growing in the West (stereograph).
13. Spraying Our Orchards (lantern).
14. Homes of Other People (stereograph).
15. Important Places in Washington (stereograph).
16. Schools in Other Lands (stereograph).
17. Making Roads (lantern).
18. Cold-pack Canning (lantern).
19. Our Gardens (lantern).
20. The Story of Bread (stereograph).
21. Binder Twine Industry (stereograph).
22. Our Pigs (lantern).
23. The Fly (lantern).
24. A Sheep Ranch (stereograph).
25. Growing Alfalfa (lantern).
26. Our Wild Flowers (lantern).
27. Our Yard Flowers (lantern).

28. Our Big Trees (lantern).
29. Christmas in Other Lands (stereograph).
30. How People Travel in Other Lands (stereograph).
31. Our National Parks (stereograph).
32. Our Big Ships (stereograph).
33. Our Big Railroad Centers (stereograph).

Piano Stories

1. Jolly Farmer Boys and Girls.
2. Bobwhite.
3. Come and Go a-Maying.
4. Merry Farmer Boys and Girls.
5. Merrily the Cuckoo.
6. Sweet Summer's Gone Away.
7. The Whistling Farmer Boy.
8. The Old Farm Gate.
9. Our Childhood Days.
10. America.
11. Missouri.
12. Star-Spangled Banner.
13. Auld Lang Syne.
14. My Old Kentucky Home.
15. Old Black Joe.
16. Old Folks at Home.
17. The Old Oaken Bucket.
18. Thanksgiving Time.
19. The Strawberry Girl.
20. The Church in the Wildwood.
21. Jolly Old St. Nicholas.
22. Voices in the Woods.
23. My Lady Sleeps.
24. Jack Frost.
25. Old Santa Claus.
26. The Flowers That Will Come in May.
27. Bob-o-link.
28. Come to the Greenwood.
29. Find a Wife, Young Man.
30. Sliding down the Hill.

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31. The Brooklet.
32. There's a Lonely Cottage by the Sea.
33. The Old Farm Gate.
34. Two Little Birds.
35. Washington's Birthday.

The Story Index

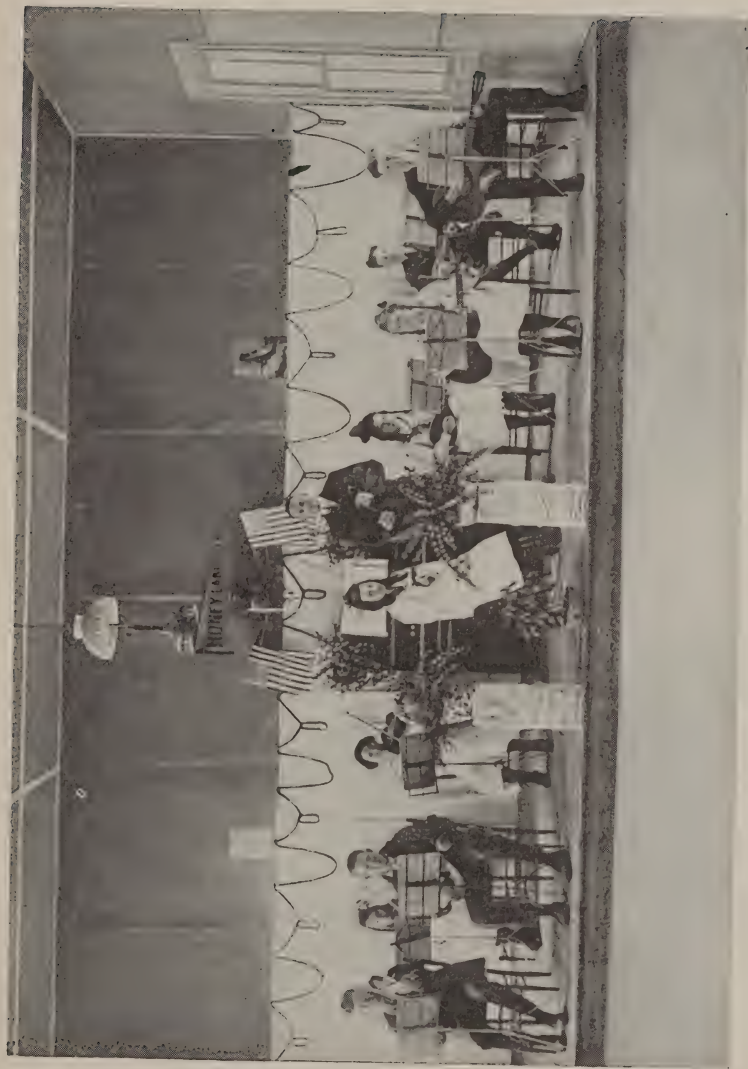
The pupils of this group filled in index cards for the various stories selected and read in the same manner as described in Group One. Jim's card, which is given here, illustrates how the pupils filled in these cards.

STORY INDEX CARD

1. *Name of story.* "Story of Franklin."
2. *Author.* "Lillie Faris."
3. *Where the story is found.* Paper classic. No. 54. Shelf 7.
4. *What the story is about.* The story is an account of the things that Benjamin Franklin did from his early boyhood to his death. It tells how he started out as a printer, how he later helped us get our Independence, and describes his inventions. The story gives a very interesting account of how Franklin discovered electricity with the kite.
5. *Name of pupil.* Jim Chase.
6. *School Group.* Group Two.

The Entertainment Program

Occasionally the pupils of this group prepared entertainment programs in connection with their story work. The following program is an exact copy of the activities of one of these meetings. The pupils in this connection selected the program activities, made artistic programs and sent one to each home of the community.



EXPERIMENTAL SCHOOL ORCHESTRA FURNISHES THE MUSIC AT ONE OF THE HONEY LAKE SCHOOL
COMMUNITY MEETINGS

COMMUNITY MEETING PROGRAM

*At the Experimental School**Thursday Evening — 7:00*

WHAT WE OFFER YOU

Community Singing (All)*Stories:* Mrs. Wiggs of the Cabbage Patch (Jim)

The Fish I Didn't Catch (George)

Alice in Wonderland (Letha)

Tom Sawyer (Alfred)

Song: Find a Wife, Young Man (Second Group)*Pictures:* Lantern Slides: Scenes in Washington*Refreshments:* Ice cream and cookies (Second Group)*Games* accompanied with Phonograph Music (All)

(Checkers, Flinch, Dominoes, Rook, Chess, Bridge)

COME OUT AND HAVE A GOOD TIME WITH US!

(Under auspices of Second Group)

3. The Projects of the Third Group

The projects engaged in by the pupils of this group were a continuation of those begun in the other groups. The following stories were selected and engaged in by the pupils, for the sake of the fun they afforded, during the operation of the Experimental School.

*Oral Stories*¹

1. Rip Van Winkle.
2. Legend of Sleepy Hollow.
3. Boy Life on the Prairie.
4. Rebecca of Sunnybrook Farm.
5. Black Beauty.
6. The Story of the Flag.

¹ The sources of most of these stories will be familiar to elementary teachers and for this reason it has seemed unwise to restrict teachers to specific titles as sole sources for any of these stories.

7. The Story of Franklin.
8. King of the Golden River.
9. Story of Pioneer Life.
10. Main Traveled Roads.
11. The Country Doctor.
12. Evangeline.
13. The Story of the Revolution.
14. The Three Golden Apples.
15. Story of Robin Hood.
16. Hans, the Eskimo.
17. The Gold Bug.
18. The Farmer — Bailey.
19. The Country School — Bailey.
20. When the Frost Is on the Pumpkin — Riley.
21. The Boy Lives on Our Farm — Riley.
22. How John Quit the Farm — Riley.
23. Wadin' in de Creek.
24. The Old Swimmin' Hole — Riley.
25. Autumn Fires — Stevenson.
26. The Hayloft — Stevenson.
27. The Paradise of Children.
28. King Midas.
29. The Miraculous Pitcher.
30. The Pied Piper of Hamelin.
31. A Christmas Carol.
32. William Tell.
33. The Courtship of Miles Standish.
34. The Talisman.
35. Moses at the Fair.
36. The Old Curiosity Shop.
37. Joan of Arc.
38. The Shepherd of the Hills.
39. Abraham Lincoln — Drinkwater.
40. Grandmother's Spinning Wheel.
41. The Measure of Pandora.
42. The Spy.
43. My Wild Irish Rose.
44. Story of a Bad Boy.

45. Little Lord Fauntleroy.
46. Sam Crewe.
47. Little Brother — Arnold.
48. Little Lame Prince.
49. Huckleberry Finn.
50. Tom Sawyer.
51. Dotty Dimple and Prudy Keeping House.
52. Buffalo Bill and the Overland Trail.
53. In Old Herrick House.
54. Friendship of Anne.
55. Country Cousins.
56. Hans Brinker.
57. Robinson Crusoe.
58. Lone Patrol.
59. Young Pitcher.
60. Uncle Remus.
61. Pitcher Pollock.
62. Abbie Ann and Emmy Lou.
63. Luck of the Dudly Grahams.
64. Blue Bonnets' Ranch Party.
65. Little Colonel's Christmas Party.
66. Captain of the Eleven.
67. The Last Lap.
68. Betty Alden.
69. Anne of Green Gables.
70. Call of the Wild.
71. Peggy.
72. Sherlock Holmes.
73. Swiss Family Robinson.
74. Corn Patch.
75. Emmeline.
76. Uncle Tom's Cabin.
77. Rebecca of Sunnybrook Farm.
78. Boys of '61.
79. Adventures of U. S. Soldiers.
80. Story of Roland.
81. African Forests and Jungles.
82. Chinese Boy and Girl.

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83. Fighting Fire.
84. Story of Kit Carson.
85. Christmas of '76.
86. Dave Crockett.
87. Kitchener's Mob.
88. Life of Boone.
89. With United States Mail.
90. Japanese Twins.
91. Fur Tail Adventure.
92. World of the Great Forest.
93. Railroad Adventure.
94. Outdoor Life With Boat, Trap, and Gun.
95. Boys of Rincorn Ranch.
96. Strenuous Adventure.
97. Scouting and War.
98. Buccaneers and Pirates of Our Coast.
99. Colonial Days.
100. Famous Adventures and Prison Escapes of the Civil War.
101. On the Trail of Grant and Lee.
102. Indian Stories.
103. When Knights Were Bold.
104. Boys of 1812.
105. Leading American Soldiers.
106. Pilgrims and Puritans.
107. Makers of Many Things.
108. Little Women.
109. Arabian Nights.
110. Alice in Wonderland.
111. Tom Brown's School Days.
112. Peck's Bad Boy.
113. Lorna Doone.
114. Hoosier Schoolmaster.
115. Life of Washington.
116. Frank on a Gunboat.
117. Editha's Burglar.
118. Little Men.
119. Hunters of the Ozarks.
120. Boys of '98.

121. Life of Lincoln.
122. Eight Cousins.
123. The Lion of St. Mark's.
124. Poor Boys Who Became Famous.
125. Treasure Island.
126. Seven Little Sisters.
127. Gulliver's Travels.
128. Mrs. Wiggs of the Cabbage Patch.
129. Merchant of Venice.
130. Midsummer Night's Dream.
131. Freckles.
132. Trail of the Lonesome Pine.
133. Old Fashioned Girl.
134. Billy Whiskers.
135. Last of the Mohicans.
136. Man without a Country.
137. Girl of the Limberlost.
138. Just David.
139. Eyes of the World.
140. When a Man's a Man.
141. Bunny Brown and Sister Sue.
142. Little Shepherd of Kingdom Come.
143. King of the Thundering Herd.
144. Oak Street Boys' Club.
145. The Boys of the Revolution.
146. Stage Coach and Tavern Days.
147. The Barefoot Boy.

Song Stories

1. America.
2. Dixie.
3. Missouri.
4. The Star-Spangled Banner.
5. Home, Sweet Home.
6. Old Black Joe.
7. U. S. A. Forever.
8. The Old Oaken Bucket.
9. Yankee Doodle.

10. Flow Gently, Sweet Afton.
11. Annie Laurie.
12. Jolly Farmer Boys and Girls.
13. Battle Hymn of the Republic.
14. Old Folks at Home.
15. Comin' through the Rye.
16. Way Down upon the Swanee River.
17. Corn Song.
18. My Heart's in the Highlands.
19. The Happy Farmer.
20. The Hay Ride.
21. Bobwhite.
22. Thanksgiving Hymn.
23. Sweet Summer's Gone Away.
24. Winding the Clock.
25. Rollicking Robin.
26. Easter Carol.
27. Columbia, the Gem of the Ocean.
28. Onward, Christian Soldiers.
29. Auld Lang Syne.
30. Nearer, My God, to Thee.
31. Old Kentucky Home.
32. The Church in the Wildwood.
33. My Mother's Bible.
34. Anvil Chorus.
35. Tenting on the Old Camp Ground.
36. America, the Beautiful.
37. Bob-o-link.
38. Come to the Greenwood.
39. Come and Go a-Maying.
40. Find a Wife, Young Man.
41. Happiness Everywhere.
42. Good-bye, Old Year.
43. My Lady Sleeps.
44. Merry Sings the Lark.
45. Merrily the Cuckoo.
46. Potomac Bells.
47. Sliding Down Hill.

48. The Brooklet.
49. The April Sun-Shower.
50. The Song of the Ducks.
51. The Flowers Will Come in May.
52. There's a Lonely Cottage by the Sea.
53. The Whistling Farmer Boy.
54. The Falling Snow.
55. The Old Farm Gate.
56. When the Green Leaves Come Again.
57. What Can the Matter Be?
58. Jingle Bells.
59. Sweet Genevieve.
60. When Johnny Comes Marching Home.

Phonograph Stories

1. The Old Oaken Bucket.
2. Potomac Bells.
3. The Church in the Wildwood.
4. My Mother's Bible.
5. America.
6. Missouri.
7. Uncle Josh in a Cafeteria.
8. My Wild Irish Rose.
9. Uncle Josh and the Honey Bee.
10. Serenade of Olden Times.
11. Chip of the Old Block.
12. When the Corn is Waving, Annie Dear.
13. Taming of the Shrew.
14. The Opera at Pumpkin Center.
15. Uncle Josh Buys an Automobile.
16. On the Campus.
17. Comin' through the Rye.
18. Star-Spangled Banner.
19. Swedish Gymnastic Dance.
20. English May Dance.
21. Italian Peasant Dance.
22. German Clap Dance.
23. Bleking Dance.

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24. It Was the Time of Lilac.
25. Ma and the Auto.
26. Smile through your Tears.
27. The Boys Over There.
28. Beautiful Annabelle Lee.
29. April Showers.
30. Blossom Time.
31. Roll On, Silvery Moon.
32. Last Rose of Summer.
33. Old Black Joe.
34. When the Sun Goes Down.
35. Turkey in the Straw.
36. The Flowers of Italy.
37. The Hunter's Greeting.
38. Boating on the Lake.
39. Auld Scotch Songs.
40. When You and I Were Young, Maggie.
41. Dixie.
42. The Happy Farmer.
43. Home, Sweet Home.
44. Yankee Doodle.
45. Uncle Tom's Trip to New York.
46. Philip and the Bee.
47. John's Troubles in the City.
48. How Grandpaw Courted Grandmaw.
49. The City Chap Visits the Country.
50. The Party at Uncle Jake's.

Picture Stories

1. Making Roads (lantern).
2. Governmental Activities at Washington (stereograph).
3. The Dairy Industry (lantern).
4. Caring for Sick People (stereograph).
5. The Shirt Industry (stereograph).
6. Our Big Newspaper Plant (stereograph).
7. Electricity in the Making (stereograph).
8. Our Penal Institutions (lantern).
9. Important Places at Washington (stereograph).

10. The Packing Industry (stereograph).
11. Coal Mining (stereograph).
12. The Shoe Industry (stereograph).
13. The Sugar Industry (stereograph).
14. The Lumber Industry (stereograph).
15. Homes in Other Lands (stereograph).
16. Schools in Other Lands (stereograph).
17. How People Travel in Other Lands (stereograph).
18. Our Big Ships (stereograph).
19. Our Big Railroad Centers (stereograph).
20. Our Woolen Mills (stereograph).
21. Our National Parks (stereograph).
22. The Cotton Industry (lantern).
23. The Poultry Farm (lantern).
24. Our Big Orchards (stereograph).
25. Making Flour (stereograph).
26. Big Cities of Other Lands (stereograph).
27. Uncle Sam's Mail (stereograph).
28. Our Poets (stereograph).
29. Cold Pack Canning (lantern).
30. The Fly (lantern).
31. Our Birds (lantern).
32. Our Wild Flowers (lantern).
33. Our Animal Helpers (lantern).

Piano Stories

1. Silver Threads among the Gold.
2. The Old Oaken Bucket.
3. In the Woodland Swing.
4. The Robins.
5. Carry Me Back to Old Virginia.
6. Missouri.
7. In the Harbor of Home, Sweet Home.
8. Jolly Farmer Boys and Girls.
9. Bobwhite.
10. Merrily the Cuckoo.
11. The Whistling Farmer Boy.
12. Our Childhood Days.

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13. Auld Lang Syne.
14. Old Kentucky Home.
15. Old Black Joe.
16. Old Folks at Home.
17. Thanksgiving Time.
18. The Church in the Wildwood.
19. Voices in the Woods.
20. Find a Wife, Young Man.
21. There's a Lonely Cottage by the Sea.
22. Washington's Birthday.
23. Christmas Time Has Come Again.
24. Columbia, the Gem of the Ocean.
25. Dixie.
26. Marching through Georgia.
27. My Bonnie.
28. Robin Redbreast.
29. Stars of the Summer Night.
30. The Sword of Bunker Hill.
31. When You and I Were Young, Maggie.
32. When Johnny Comes Marching Home.
33. The Flowers Will Come in May.
34. Flow Gently, Sweet Afton.
35. Comin' Through the Rye.
36. Rollicking Robin.
37. Annie Laurie.
38. America, the Beautiful.
39. Bob-o-link.
40. The Song of the Ducks.
41. The Hay Ride.
42. Good-bye, Old Year.
43. Sweet Genevieve.
44. My Heart 's in the Highlands.

The Story Index

The pupils of this group filled in index cards for the various stories selected and read. Lee's card given on the next page is typical of how these cards were filled in by the members of his group.

STORY INDEX CARD

1. *Name of story.* "Huckleberry Finn."
2. *Author.* Mark Twain.
3. *Where the story is found.* "Huckleberry Finn."
No. 98. Shelf 10.
4. *What the story is about.* This is a story about the adventures of a boy, Huckleberry Finn. It begins by describing Huck's life with two old maids with whom he was living; how his father visited him there and later stole him, taking him to his hut on the island. Huck's life with his father is then described and is very pathetic because of the cruel treatment of his father. The story then describes how Huck ran away from his father; his adventures with a negro slave and two tramps; the search for Huck by his friends; and later how Huck and Tom happened to return home. The story also describes home life before the Civil War. It is a story full of thrilling adventures.
5. *Name of pupil.* Lee Brock
6. *School Group.* Group Three.

The Entertainment Program

In connection with the story work, the pupils of this group prepared entertainment programs from time to time. On the next page is a copy of one of these programs, typical of many such programs prepared by the pupils of this group during the four years that the Experimental School was in operation. In every instance the pupils selected the program activities, and made artistic programs to send to the various homes of the community.

COMMUNITY MEETING PROGRAM

At the Experimental School

Tuesday Evening — 7:30

ACTIVITIES OF THE EVENING

Community Singing (All)

Stories: Huckleberry Finn (Lee)

How the Telephone Was Invented (Neva)

When a Man's a Man (Ralph)

Country Cousins (Jewell)

Piano solo: Silver Threads among the Gold (Jewell)

Carry Me Back to Old Virginia (Neva)

Pictures: Lantern Slides: Homes in Other Lands

Songs: My Wild Irish Rose (Jewell, Neva, Rhoda,
Ralph, and Lee)

Rollicking Robin (Audrey and May)

Refreshments and Phonograph Music

(Apple cider and cookies)

SPEND THE EVENING WITH US IN HAVING A GOOD TIME!

(Under direction of Group Three)

CHAPTER IV

OUTCOMES OF CURRICULUMS

- I. COMMON FACTS AND SKILLS
- II. ATTITUDES TOWARD THE SCHOOL AND EDUCATION
- III. CHANGES IN COMMUNITY LIFE

CHAPTER IV. OUTCOMES OF CURRICULUMS

I. COMMON FACTS AND SKILLS

1. Changes in Common Facts and Skills

AN experience of four years with the school described in the preceding chapter indicates that children can set up their own purposes and can work these purposes out effectively under proper guidance. In so doing it has been apparent that they grow in qualities of initiative, judgment, and self-direction. But does a school conducted on this plan give the common facts and skills commonly thought of as the end to be attained through elementary education?

To answer this question standardized tests were given to the children at the end of the four-year period, in reading, handwriting, arithmetic, composition, spelling, American history, and geography. The scores of these tests have been compared with national averages so as to indicate more fully the quality of achievement. Furthermore, the achievements of the children of the Experimental School have been compared with the achievements of the children of the Control Schools, selected on a basis of rough equivalence of conditions pointed out in detail in Chapter I. It will be recalled that there was practical equivalence in the Three R's at the beginning of the experiment. As the experiment progressed the development of the Experimental School plan necessitated modifications in its conditions, so that increasingly there were differences between the contrasted procedures. For this reason it should be recognized at the outset that this was not a complete control experiment in the sense demanded by exact scientific method, since there were more variable factors than the one which was the special subject of the investigation.

With this warning to the reader against unwarranted conclusions from the results reported, the scores of ten standardized tests are presented in succeeding tables in order to determine to what extent boys and girls acquire the common facts and skills through the realization of their purposes in real life. It should also be noted again in this connection that the scales and tests used in 1921 were, except in one case, not the same as had been used in 1917. The one exception was the Thorndike Handwriting Scale which was used for both measurements. It is therefore impossible to subtract the 1917 scores from those of 1921 to show improvements. However, a reference to Table I, Chapter I, indicates a practical equality of the two groups in the Three R's at the beginning of the experiment. Where, therefore, the 1921 scores have shown superiority in the experimental group's achievements, it seems fair to accept this as an indication of greater improvement in the case of the experimental group.

One further point should be observed in a study of the scores in the succeeding tables. The traditional school subjects were not taught, as such, to the boys and girls of the Experimental School. The subject matter of these subjects received attention only when it *contributed genuinely to a more effective realization of the purpose of boys and girls at the time*. The use of number and writing by the First Group of children in keeping scores in playing Roly Poly, the use of percentage by the Second Group of children in expressing the facts of their survey of community diseases, or the use of geographical, historical, and civic information by the Third Group of children in working out the League of Nations project are typical illustrations of the use of subject matter by boys and girls in realizing their own purposes.¹ Subject matter used in this fashion plays a very genuine part in the realization of the purposes of boys and girls, and, as such, is of *appreciative* and *immediate* value to them. Keeping score is a very genuine part, for instance, of Roly Poly. Processes in writing and adding certain numbers not only help Carl to keep a record of his successive

¹ For a detailed account of these projects, see Chapter III.

bowlings, but, in addition, tell him whether he has played a better game than Christene. These processes are thus a very real part of Roly Poly from Carl's point of view. They are, in other words, of immediate concern and value to him, and for this reason he *purposes* to engage in them in the same fashion and for the same reason that he purposes to stand on the bowling line and bowl at the Roly Polys in a certain way.

This use of subject matter does not mean, as sometimes interpreted, that children's purposes are utilized for the sake of teaching so much — say minimum essentials of reading, arithmetic, writing, history, etc. It means exactly the opposite. Subject matter is utilized for the sake of what it contributes to a more satisfying realization of child purposes. The purpose is primary and dominates in defining the *activity* that is to eventuate in its realization. Subject matter, as here interpreted, is the activity. It is, in the case of Roly Poly, the processes involved in planning the game, keeping score, bowling at the Roly Polys, drawing the bowling and triangle lines, arranging the Roly Polys on the lines, and the actions, gestures, words, approval, and disapproval of other children and of the teacher; in short, anything that *enters into* and becomes an *intrinsic* part of the game. In this sense, subject matter plays a very important rôle in child life; it is an intrinsic part of child life.

With the Control Schools, exactly the reverse aim was practiced. Mastery of so much arithmetic, history, spelling, grammar, geography, writing, physiology, civics, agriculture, and reading within a certain specific time was the primary aim of these schools, and if child purposes were used at all, they were used as means for achieving this aim. Subject matter, in the traditional sense, was thus the primary aim. It was taught to boys and girls not for what it would do for them as *boys and girls*, but rather for what it was expected to do for them later on as men and women. Teaching second grade children, for instance, to recognize cubes and rectangles, multiplication tables through the six's, and simple fractions, third grade children to write numbers to ten thousand,

or seventh grade children corporation, exchange, stocks and bonds, and trade discount are typical illustrations of the use of one kind of subject matter in these schools, and this is representative of the kind of subject matter found in the other school subjects.

Functions Measured

Ten scores were secured for each pupil with the exception of those in the first and second grades for whom the scores in division, composition, history, and geography were omitted. The pupils were measured in the following functions:

1. Penmanship quality.
2. Written composition.
3. Spelling accuracy.
4. American history information.
5. Geographical information.
6. Reading comprehension.
7. Addition accuracy.
8. Multiplication accuracy.
9. Subtraction accuracy.
10. Division accuracy.

Pupils Measured

There were forty-one pupils enrolled in the Experimental School. Forty of these were selected for the final measures in common facts and skills, attitudes toward the school and education, and conduct in life outside the school. One pupil was rejected because it was impossible to match him with one from the Control Schools in intelligence level. There were sixty pupils enrolled in the two Control Schools. Forty of these were selected for the final measures on the basis of their similarity with the forty selected from the Experimental School in chronological age, years of schooling, years spent in the schools of the experiment, and intelligence level.

Table III gives a list of these pupils. The first part indicates the chronological age, years of schooling, years spent in the schools

of the experiment, and intelligence level of each pupil selected from the Experimental and Control Schools. The first pupil of each pair is a pupil of the Experimental School; the second is a pupil of the Control Schools. The second part gives a list of pupils rejected because of a variation from one or all of the above factors. These pupils are all from the Control Schools, with the exception of the one indicated in the table. This indicates that the forty pupils selected from the Control Schools for the final measures were a fair sampling of the sixty children enrolled in these schools.

TABLE III

A. COMPARISON OF CHRONOLOGICAL AGE, NUMBER YEARS' SCHOOLING, NUMBER YEARS SPENT IN THE SCHOOLS OF THE EXPERIMENT, AND INTELLIGENCE SCORES FOR ALL PUPILS ENROLLED IN THE EXPERIMENTAL AND CONTROL SCHOOLS DURING THE FOUR YEARS' PERIOD ENDING MAY, 1921

INITIALS OF PUPILS	AGE IN YEARS AND MONTHS	YEARS OF SCHOOLING	YEARS IN THESE SCHOOLS	INTELLIGENCE SCORE
B. P.	7-4	1	1	51
M. J.	7-1	1	1	50
F. S.	7-1	1	1	38
C. W.	7-5	1	1	39
A. C.	7-2	1	1	37
W. S.	7-0	1	1	38
C. B.	7-6	1	1	36
L. J.	7-5	1	1	35
N. M.	7-2	1	1	34
M. J.	7-3	1	1	35
V. C.	7-0	1	1	31
L. H.	7-4	1	1	32
G. K.	7-4	1	1	30
W. W.	7-2	1	1	31
C. C.	7-5	1	1	37
R. D.	7-6	1	1	38

TABLE III — *Continued*

INITIALS OF PUPILS	AGE IN YEARS AND MONTHS	YEARS OF SCHOOLING	YEARS IN THESE SCHOOLS	INTELLIGENCE SCORE
C. C.	8-2	2	2	61
R. J.	8-1	2	2	61
P. W.	8-4	2	2	64
R. C.	8-1	2	2	63
M. C.	8-0	2	2	56
K. D.	8-1	2	2	55
D. S.	8-1	2	2	50
A. D.	8-2	2	2	51
R. C.	8-5	2	2	61
O. L.	8-5	2	2	61
L. J.	8-2	2	2	52
A. W.	8-0	2	2	52
O. E.	8-4	2	2	55
H. U.	8-1	2	2	54
E. M.	8-5	2	2	50
R. E.	8-3	2	2	51
I. N.	9-0	3	3	80
I. H.	9-3	3	3	80
J. B.	9-2	3	3	71
I. H.	9-4	3	3	70
K. M.	9-6	3	3	76
A. C.	9-4	3	3	77
T. C.	9-5	3	3	73
Z. C.	9-0	3	3	74
J. J.	9-1	3	3	82
R. S.	9-0	3	3	81
G. S.	10-4	4	4	90
L. C.	10-6	4	4	89
L. G.	10-0	4	4	92
S. J.	10-2	4	4	91
G. S.	10-4	4	4	82
E. E.	10-6	4	4	82

TABLE III — *Continued*

INITIALS OF PUPILS	AGE IN YEARS AND MONTHS	YEARS OF SCHOOLING	YEARS IN THESE SCHOOLS	INTELLIGENCE SCORE
A. P.	10-0	4	4	90
R. W.	10-5	4	4	90
J. C.	11-5	5	5	102
R. D.	11-2	5	5	103
O. C.	12-7	6	6	112
R. D.	12-8	6	6	111
L. M.	12-4	6	6	115
L. L.	12-1	6	6	114
B. D.	12-4	6	6	113
V. W.	12-3	6	6	113
E. D.	13-1	7	7	120
B. H.	13-5	7	7	121
R. C.	13-6	7	7	124
L. L.	13-3	7	7	123
M. S.	13-1	7	7	123
B. E.	13-5	7	7	122
J. C.	13-4	7	7	140
B. W.	13-2	7	7	139
G. E.	13-1	7	7	132
E. C.	13-5	7	7	133
A. W.	13-5	7	7	117
C. W.	13-3	7	7	116
G. K.	14-4	8	8	133
F. D.	14-2	8	8	138
R. D.	14-6	8	8	130
E. L.	14-7	8	8	129
N. B.	14-4	8	8	139
S. D.	14-3	8	8	139
M. S.	15-3	8	8	133
M. L.	15-6	8	8	135
L. B.	15-8	8	8	124
E. L.	15-1	8	8	123

TABLE III — *Concluded*

B. PUPILS NOT TAKING FINAL TEST

The following pupils were rejected because of a variation in one or all of the required factors of the experiment. For instance, P. R., a pupil from the Experimental School, was rejected because it was impossible to match this pupil with one from the Control Schools in intelligence level; D. L., a pupil from the Control Schools, was rejected because he had had only two years' schooling and had spent only two years in the schools of the experiment, whereas the experiment demanded that a pupil of his age should have had three years' schooling and should have been a student in the Control Schools for three years, etc.

INITIALS OF PUPILS	AGE IN YEARS AND MONTHS	YEARS OF SCHOOLING	YEARS IN THESE SCHOOLS	INTELLIGENCE SCORE
P. R. ¹	7-7	1	1	18
T. M.	7-5	1	1	26
H. L.	7-3	1	1	28
T. R.	7-2	1	1	49
L. I.	7-4	1	1	24
M. M.	8-8	2	2	41
A. H.	8-5	2	2	53
S. L.	8-2	2	2	49
C. P.	9-1	3	1	83
D. L.	9-5	2	2	75
H. O.	9-3	3	3	79
R. W.	10-1	4	4	73
W. A.	11-4	4	4	101
V. B.	12-6	6	6	122
B. O.	12-1	6	5	111
E. J.	12-5	5	5	108
F. J.	13-4	7	7	127
C. N.	13-2	7	7	130
W. T.	14-4	8	8	136
C. L.	15-6	7	7	117
G. W.	16-1	8	8	129

¹ Pupil of the Experimental School.

Period of Measurement

The experiment extended over a period of four years. The initial measurements were made at the beginning of the school year 1917 and include tests in reading, handwriting, spelling, and arithmetic. The scores for these tests are reported in Table I, Chapter I. The final measurements were made during the first week in September, 1921, and include tests in reading, handwriting, spelling, history, arithmetic, geography, and composition. The scores are reported in Tables IV to XXIII inclusive.

Tests and Scales

The following tests and scales were used in measuring the efficiency of the pupils in the common facts and skills:

1. Tests and Scales for 1917 Measurements.

Thorndike: Scale for Measuring Handwriting.

Thorndike: Reading Scale Alpha.

Ayres: A Measuring Scale for Ability in Spelling.

Courtis: Research Tests in the Four Fundamental Operations in Arithmetic, Series I.

2. Tests and Scales for 1921 Measurements.

Thorndike-McCall: Reading Scale, Form I (grades four to eight inclusive).

Haggerty: Reading Examination, Sigma I, Text I (grades one to three inclusive).

Van Wagenen: American History Scales, Information Scale A.

Hillegas: Scale for the Measurement of Quality in English Composition.

Woody: Measurements of Some Achievements in Arithmetic, Series B (grades four to eight inclusive).

Collings: Tests for Measuring the Four Fundamental Operations in Arithmetic (for the first four grades).

Starch: Spelling Scales, Forms 1 and 2.

Thorndike: Scale for Measuring Handwriting.

Hahn-Lackey: Geography Scale.

National Intelligence Tests, Scale A, Form 1 (grades four to eight inclusive).

Haggerty: Intelligence Examination, Delta I (grades one to three inclusive).

National Standards

The scores of the children of the Experimental School in reading, addition, subtraction, multiplication, division, spelling, composition, American history, geography, and handwriting have been compared with National Standards in these subjects so as to indicate more fully the quality of achievement. The National Standards represent the achievement of children in various cities of the United States in these functions and were secured from statistical books and studies reporting these standards.

Classification of Pupils for Tests

Classification of pupils in grades for purposes of tests were made on the basis of the number of years spent in the school. This plan was employed for both the Experimental and Control Schools.

The Tables

1. First group. The data are presented in two groups of tables. The first group includes Tables IV to XII inclusive. These tables show each grade of the Experimental School compared with the corresponding grade of the Control Schools and with the National Standards in all functions in which the grade was measured over the four-year period. A summary of grade comparisons is given in Table XII.

In these tables these facts are shown: (1) the number of median scores that favor one or the other of the Experimental or Control Schools; (2) the number of median scores that favor

one or the other of the Experimental School or the National Standards; (3) the mean achievement of the Experimental School expressed in percentage of the achievement of the Control Schools; and (4) the mean achievement of the Experimental School expressed in percentage of the achievement represented by the National Standards.

2. Second group. The second group of tables include Tables XIII to XXIII inclusive. In these tables comparisons between the Experimental and Control Schools are presented for all functions taken separately. All pupils in the Experimental School are compared with all pupils in the Control Schools in the amount of achievement in each function made during the four-year period. Table XXIII is a summary of these comparisons.

In these tables, two results are shown: (1) the mean achievement of both the Experimental and Control Schools in each function; and (2) the equated difference between the Experimental and Control Schools, that is, the amount of time that it would take the Control Schools to attain the same amount of achievement already attained by the Experimental School.

3. Original data. The original data from which the scores of Tables XXIV to XXIX inclusive are derived are filed in the office of County Superintendent, McDonald County, Pineville, Missouri. The original data from which scores of all other tables of this report are derived are filed with Teachers College, Columbia University, New York.

4. Purpose of tables. Tables IV to XXIII inclusive propose to answer the following questions:

1. Out of the total number of functions measured, how many median scores favor the Experimental School when compared with the scores of the Control Schools?
2. Out of the total number of functions measured, how many median scores favor the Experimental School when compared with the scores represented by the National Standards?

3. What is the median achievement of the Experimental School expressed in percentage of the achievement of the Control Schools?
4. What is the median achievement of the Experimental School expressed in percentage of the achievement represented by the National Standards?
5. What is the mean achievement made by all pupils of the Experimental School and by all pupils of the Control Schools in each of the functions?
6. What is the equated difference between the Experimental School and the Control Schools in each function, and which school does the difference favor?

5. Administering and scoring tests. The administering of the tests was made, and the grading of all papers was done, by the writer personally, so as to eliminate any possible error that might occur from a variation of method of different examiners.

6. Symbols used in tables. The following is an interpretation of the symbols used in all of the succeeding tables:

(C) shows the median scores for the Control Schools.

(E) shows the median scores for the Experimental School.

(S) shows the National Standards.

(E-C) shows the difference between the Experimental and Control Schools in median scores. Plus favors the Experimental School; minus favors the Control Schools.

(E-S) shows the difference between the Experimental School and National Standards in median scores. Plus favors the Experimental School; minus favors the National Standards.

(P-1) shows the median achievement for each function of the Experimental School expressed in percentage of the median achievement of the Control Schools.

(P-2) shows the median achievement for each function of the Experimental School expressed in percentage of the median achievement represented by the National Standards.

(M) shows the mean of (P-1) and (P-2).

TABLE IV

COMPARISON OF MEDIAN SCORES FOR THE FIRST GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship	5.0	6.2	...	1.2	....	124.0%	.....
Spelling	6.0	9.7	10.0	3.7	-0.3	162.0%	97.0%
Reading	5.5	9.5	6.0	4.0	3.5	172.0%	158.3%
Addition	15.0	30.0	...	15.0	....	200.0%	.....
Subtraction	6.5	13.0	...	6.5	....	200.0%	.....
					(M) ¹	171.7%	127.6%

1. Out of five differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of two differences in median scores shown under (E-S) one favors the Experimental School and one favors the National Standards.
3. The mean achievement (M) of the Experimental School is 171.7% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School in two functions only is 127.6% of the achievement represented by the National Standards. National Standards are not available for the other functions of this grade.

¹ Caution is necessary in interpreting the M's. The functions measured have all been treated as if equal in weight, with the result that arithmetic receives a disproportionate share and also one which varies from group to group.

TABLE V

COMPARISON OF MEDIAN SCORES FOR THE SECOND GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship . . .	7.8	8.9	9.3	1.1	-0.4	114.5%	95.7%
Spelling	21.0	36.0	30.0	15.0	6.0	171.4%	120.0%
Reading	11.5	14.5	12.0	4.0	2.5	126.1%	120.8%
Addition	13.0	14.0		1.0		107.7%	
Subtraction . . .	35.0	47.0		12.0		134.2%	
Multiplication . .	6.5	10.5		4.0		161.5%	
					(M)	135.9%	111.6%

1. Out of six differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of three differences in median scores shown under (E-S) two favor the Experimental School and one the National Standards.
3. The mean achievement (M) of the Experimental School is 135.9% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School in three functions only is 111.6% of the achievement represented by the National Standards. National Standards are not available for the other functions of this grade.

TABLE VI

COMPARISON OF MEDIAN SCORES FOR THE THIRD GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship	8.0	9.4	9.7	1.4	-0.3	117.0%	96.9%
Spelling	31.0	42.0	40.0	11.0	2.0	132.2%	105.0%
Reading	13.5	19.5	15.0	6.0	4.5	144.4%	130.0%
Addition	43.0	47.5		4.5		110.4%	
Subtraction	40.5	43.0		2.5		106.1%	
Multiplication . . .	24.5	26.5		2.0		108.2%	
Division	29.0	31.0		2.0		106.9%	
					(M)	118.2%	110.6%

1. Out of seven differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of three differences in median scores shown under (E-S) two favor the Experimental School and one favors the National Standards.
3. The mean achievement (M) of the Experimental School is 118.2% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School is 110.6% of the achievement represented by the National Standards. National Standards are not available for the other functions of this grade.

TABLE VII

COMPARISON OF MEDIAN SCORES FOR THE FOURTH GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship	8.3	10.0	10.1	1.7	-0.1	124.0%	99.0%
Composition	2.1	3.8	3.5	1.7	0.3	180.9%	108.5%
Spelling	52.0	53.0	51.0	1.0	2.0	101.9%	103.9%
American History . .	2.2	6.4	5.5	4.2	0.9	293.2%	116.3%
Geography	21.0	68.0	66.0	47.0	2.0	323.8%	107.4%
Reading	41.0	44.0	41.8	3.0	2.2	108.0%	105.2%
Addition	10.0	12.5	11.0	2.5	1.5	125.0%	113.6%
Subtraction	9.0	9.4	8.0	0.4	1.4	104.4%	117.5%
Multiplication	10.0	11.5	7.0	1.5	4.5	115.0%	164.2%
Division	6.5	8.5	5.0	2.0	3.5	130.7%	170.0%
					(M)	160.2%	120.1%

1. Out of ten differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of ten differences in median scores shown under (E-S) nine favor the Experimental School and one favors the National Standards.
3. The mean achievement (M) of the Experimental School is 160.2% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School is 120.1% of the achievement represented by the National Standards.

TABLE VIII

COMPARISON OF MEDIAN SCORES FOR THE FIFTH GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship . . .	8.9	10.5	10.7	1.6	-0.2	117.9%	98.1%
Composition . . .	3.1	5.0	4.0	1.9	1.0	162.0%	125.0%
Spelling	51.0	62.0	61.0	1.0	1.0	101.6%	101.5%
American History .	4.8	10.1	10.3	5.3	-0.2	208.8%	98.1%
Geography	28.0	82.0	79.0	54.0	3.0	292.8%	103.8%
Reading	46.0	48.0	48.0	2.0	0.0	104.6%	100.0%
Addition	13.0	14.0	15.0	1.0	-1.0	107.6%	93.3%
Subtraction	9.5	11.0	10.0	1.0	1.0	115.7%	110.0%
Multiplication . . .	10.5	11.5	11.0	1.0	0.5	109.3%	104.5%
Division	9.5	9.7	7.0	0.2	2.7	102.3%	138.5%
					(M)	140.1%	107.2%

1. Out of ten differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of nine differences in median scores shown under (E-S) six favor the Experimental School and three favor the National Standards.
3. The mean achievement (M) of the Experimental School is 140.1% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School is 107.2% of the achievement represented by the National Standards.

TABLE IX

COMPARISON OF MEDIAN SCORES FOR THE SIXTH GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship	9.2	11.5	11.3	2.3	0.2	124.1%	101.1%
Composition	3.4	5.8	4.5	2.4	1.3	170.5%	128.8%
Spelling	70.0	72.0	71.0	2.0	1.0	102.8%	101.4%
American History . .	6.8	18.8	12.3	12.0	6.5	187.1%	152.8%
Geography	39.0	89.0	84.0	50.0	5.0	228.2%	105.8%
Reading	46.3	52.5	53.7	6.2	-1.2	113.1%	97.7%
Addition	15.0	15.5	16.0	0.5	-0.5	133.3%	96.8%
Subtraction	10.0	12.9	12.0	2.9	0.9	129.0%	107.5%
Multiplication	10.0	13.0	15.0	3.0	-2.0	130.7%	86.6%
Division	11.0	11.3	10.0	0.3	-1.3	102.7%	113.0%
					(M)	129.0%	109.1%

1. Out of ten differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of ten differences in median scores shown under (E-S) six favor the Experimental School and four favor the National Standards.
3. The mean achievement (M) of the Experimental School is 129.0% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School is 109.1% of the achievement represented by the National Standards.

TABLE X

COMPARISON OF MEDIAN SCORES FOR THE SEVENTH GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship	9.1	12.1	11.8	3.0	0.3	137.3%	102.5%
Composition	4.7	5.2	5.0	1.5	1.2	131.9%	124.0%
Spelling	79.0	81.0	78.0	2.0	3.0	102.5%	103.8%
American History	7.1	12.8	14.3	5.7	-1.5	180.6%	89.5%
Geography	46.0	94.0	92.0	48.0	2.0	204.3%	102.3%
Reading	51.1	56.8	58.3	5.7	-1.5	109.8%	97.4%
Addition	15.8	17.3	18.0	1.5	-0.7	109.5%	96.1%
Subtraction	11.5	12.5	13.0	1.0	-0.5	108.6%	96.1%
Multiplication	12.5	15.5	17.0	3.0	-1.5	124.0%	91.2%
Division	11.0	11.5	13.0	0.5	-1.5	104.2%	88.4%
					(M)	120.2%	99.1%

1. Out of ten differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of ten differences in median scores shown under (E-S) six favor the Experimental School and six favor the National Standards.
3. The mean achievement (M) of the Experimental School is 120.2% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School is 99.1% of the achievement represented by the National Standards.

TABLE XI

COMPARISON OF MEDIAN SCORES FOR THE EIGHTH GRADE OF THE EXPERIMENTAL SCHOOL WITH THE CONTROL SCHOOLS AND NATIONAL STANDARDS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

FUNCTIONS	(C)	(E)	(S)	(E-C)	(E-S)	(P-1)	(P-2)
Penmanship . . .	10.0	14.0	12.6	4.0	1.4	140.0%	111.1%
Composition . . .	5.2	6.8	5.5	1.6	1.3	130.7%	123.6%
Spelling	89.0	90.0	85.0	1.0	5.0	101.1%	105.8%
American History .	9.2	17.2	16.8	8.0	0.4	186.6%	102.3%
Geography	51.0	96.0	92.0	45.0	2.0	188.2%	104.3%
Reading	55.8	64.2	60.9	8.4	4.7	116.3%	105.4%
Addition	17.0	17.4	18.5	0.4	-1.1	105.8%	94.1%
Subtraction	13.0	14.1	14.5	1.1	-0.4	108.3%	97.6%
Multiplication . . .	18.0	15.0	18.0	3.0	-3.0	120.0%	83.3%
Division	12.0	12.4	14.0	0.4	-1.6	103.3%	88.5%
					(M)	130.1%	101.6%

1. Out of ten differences in median scores shown under (E-C) all favor the Experimental School.
2. Out of ten differences in median scores shown under (E-S) six favor the Experimental School and four favor the National Standards.
3. The mean achievement (M) of the Experimental School is 130.1% of the achievement of the Control Schools.
4. The mean achievement (M) of the Experimental School is 101.6% of the achievement represented by the National Standards.

TABLE XII

SUMMARY OF THE ACHIEVEMENT OF THE EXPERIMENTAL SCHOOL IN TERMS OF THE CONTROL SCHOOLS AND NATIONAL STANDARDS FOR ALL GRADES IN ALL FUNCTIONS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	MEDIAN SCORES FAVORING EXPERIMENTAL SCHOOL WHEN COMPARED WITH CONTROL SCHOOLS AND NATIONAL STANDARDS				MEAN ACHIEVEMENT OF EXPERIMENTAL SCHOOL WHEN EXPRESSED IN TERMS OF	
	(E)	(C)	(E)	(S)	(C)	(S)
First	5	0	1	1	171.7%	127.6%
Second	6	0	2	1	135.9%	111.6%
Third	7	0	2	1	118.2%	110.6%
Fourth	10	0	9	1	160.2%	120.7%
Fifth	10	0	6	3	140.1%	107.2%
Sixth	10	0	6	4	129.0%	108.7%
Seventh	10	0	4	6	120.2%	99.1%
Eighth	10	0	6	4	130.1%	101.6%
	68	0	36	21	(M) 138.1%	110.8%

1. Of a grand total of sixty-eight median achievement scores the Experimental School was superior in all when compared with the Control Schools.
2. Of a grand total of fifty-seven median achievement scores the Experimental School was superior in thirty-six when compared with the National Standards.
3. The mean achievement (M) of the Experimental School for all grades and all functions when expressed in terms of the achievement of the Control Schools was 138.1%.
4. The mean achievement (M) of the Experimental School for all grades and all functions when expressed in terms of the achievement represented by the National Standards was 110.8%.

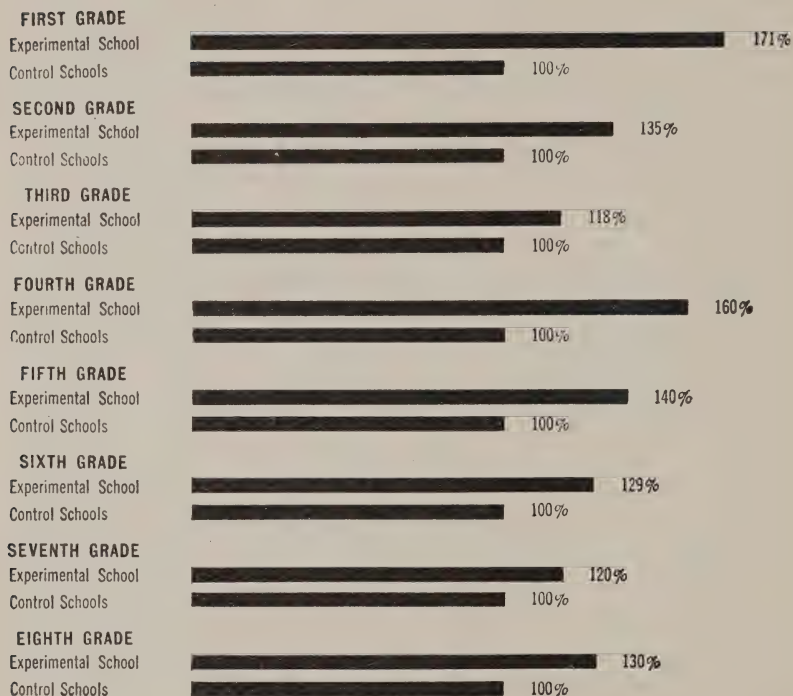


CHART II. Mean percentage achievement in all functions for each grade of the Experimental School at the end of the four-year period in terms of the achievement of the Control Schools.

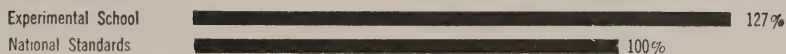
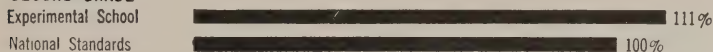
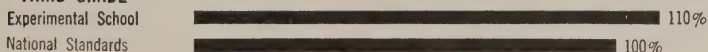
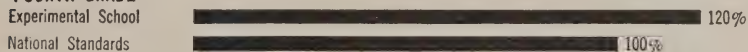
FIRST GRADE**SECOND GRADE****THIRD GRADE****FOURTH GRADE****FIFTH GRADE****SIXTH GRADE****SEVENTH GRADE****EIGHTH GRADE**

CHART III. Mean percentage achievement in all functions for each grade of the Experimental School at the end of the four-year period in terms of the achievement represented by the National Standards.

TABLE XIII

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR ALL GRADES IN PENMANSHIP FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
First	5.0	6.2
Second	7.5	8.6
Third	8.0	9.4
Fourth	8.3	10.0
Fifth	8.9	10.5
Sixth	9.2	11.5
Seventh	9.1	12.1
Eighth	10.0	14.0
Total	66.0	82.3
Average Achievement	8.5	10.3
Difference in Average Achievement		1.80
Equated Difference ¹ . . . . .		.21

1. The Experimental School made an average achievement of 10.3 as against 8.5 for the Control Schools.
2. The equated difference is .21 and favors the Experimental School. This means that it would take the Control Schools .21 of a year further working at the present rate to achieve as great amount as did the Experimental School.

¹ The equated difference was computed by subtracting the smaller from the larger of the two average achievements and dividing the remainder by the smaller average (Notes from McCall, Wm., *How to Measure in Education*, 1920).

TABLE XIV

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR ALL GRADES IN SPELLING FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
First	28.0	38.0
Second	21.0	36.0
Third	31.0	42.0
Fourth	52.0	53.0
Fifth	61.0	62.0
Sixth	70.0	72.0
Seventh	79.0	81.0
Eighth	89.0	90.0
Total	431.0	449.0
Average Achievement	53.8	56.2
Difference in Average Achievement		2.40
Equated Difference . . . . .		.04

1. The Experimental School made an average achievement of 56.2 as against 53.8 for the Control Schools.
2. The equated difference is .04 and favors the Experimental School

TABLE XV

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR ALL GRADES IN READING FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
First	5.5	9.5
Second	11.5	14.5
Third	13.5	19.5
Fourth	41.0	44.0
Fifth	46.0	48.0
Sixth	46.3	50.5
Seventh	51.1	56.8
Eighth	55.8	64.2
Total	270.7	307.0
Average Achievement	32.7	38.3
Difference in Average Achievement		5.60
Equated Difference . . . . .		.17

1. The Experimental School made an average achievement of 38.3 as against 32.7 for the Control Schools.
2. The equated difference is .17 and favors the Experimental School.

TABLE XVI

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR ALL GRADES IN ADDITION FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
First	15.0	30.0
Second	13.0	14.0
Third	43.0	47.0
Fourth	10.0	12.5
Fifth	13.0	14.0
Sixth	15.0	15.5
Seventh	15.8	17.3
Eighth	17.0	17.4
Total	141.0	168.2
Average Achievement	17.6	21.0
Difference in Average Achievement		3.40
Equated Difference . . . . .		.20

1. The Experimental School made an average achievement of 21.0 as against 17.6 for the Control Schools.
2. The equated difference is .20 and favors the Experimental School.

TABLE XVII

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR ALL GRADES IN SUBTRACTION FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
First	6.5	13.0
Second	6.6	47.0
Third	40.5	43.0
Fourth	9.0	9.4
Fifth	9.5	11.0
Sixth	10.0	12.9
Seventh	11.5	12.5
Eighth	12.0	13.0
Total	103.5	161.8
Average Achievement	12.9	20.2
Difference in Average Achievement		7.30
Equated Difference . . . . .		.56

1. The Experimental School made an average achievement of 20.2 as against 12.9 for the Control Schools.
2. The equated difference is .56 and favors the Experimental School.

TABLE XVIII

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR GRADES TWO TO EIGHT INCLUSIVE IN MULTIPLICATION FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
Second	6.5	10.5
Third	24.5	26.5
Fourth	10.0	11.5
Fifth	10.5	11.5
Sixth	10.0	13.0
Seventh	12.5	15.5
Eighth	15.0	18.0
Total	89.0	106.5
Average Achievement	11.1	13.3
Difference in Average Achievement		2.20
Equated Difference . . . . .		.19

1. The Experimental School made an average achievement of 13.3 as against 11.1 for the Control Schools.
2. The equated difference is .19 and favors the Experimental School.

TABLE XIX

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR GRADES THREE TO EIGHT INCLUSIVE IN DIVISION FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
Third	29.0	31.0
Fourth	6.5	8.5
Fifth	9.5	9.7
Sixth	11.0	11.3
Seventh	11.0	11.5
Eighth	12.0	12.4
Total	79.0	84.4
Average Achievement	13.1	14.0
Difference in Average Achievement . . . . .		.90
Equated Difference . . . . .		.06

1. The Experimental School made an average achievement of 14.0 as against 13.1 for the Control Schools.
2. The equated difference is .06 and favors the Experimental School.

TABLE XX

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR GRADES FOUR TO EIGHT INCLUSIVE IN GEOGRAPHY FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
Fourth	21.0	68.0
Fifth	28.0	82.0
Sixth	39.0	89.0
Seventh	46.0	94.0
Eighth	51.0	96.0
Total	185.0	429.0
Average Achievement	37.0	85.8
Difference in Average Achievement		48.80
Equated Difference		1.04

1. The Experimental School made an average achievement of 85.8 as against 37.0 for the Control Schools.
2. The equated difference is 1.04 and favors the Experimental School.

TABLE XXI

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR GRADES FOUR TO EIGHT INCLUSIVE IN AMERICAN HISTORY FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
Fourth	2.2	6.4
Fifth	4.8	10.1
Sixth	6.8	12.8
Seventh	7.1	12.8
Eighth	9.2	17.2
Total	30.1	59.3
Average Achievement	6.0	11.8
Difference in Average Achievement		5.80
Equated Difference . . . . .		.90

1. The Experimental School made an average achievement of 11.8 as against 6.0 for the Control Schools.
2. The equated difference is .90 and favors the Experimental School.

TABLE XXII

COMPARISON OF MEDIAN SCORES SHOWING EQUATED DIFFERENCE FOR GRADES FOUR TO EIGHT INCLUSIVE IN COMPOSITION FOR THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

GRADES	(C)	(E)
Fourth	2.1	3.6
Fifth	3.1	5.0
Sixth	3.4	5.8
Seventh	4.7	6.2
Eighth	5.2	6.8
Total	18.5	27.4
Average Achievement	3.7	5.4
Difference in Average Achievement		1.70
Equated Difference . . . . .		.45

1. The Experimental School made an average achievement of 5.4 as against 3.7 for the Control Schools.
2. The equated difference is .45 and favors the Experimental School.

TABLE XXIII

SUMMARY OF EQUATED DIFFERENCE IN ALL FUNCTIONS FOR ALL GRADES OF THE EXPERIMENTAL AND CONTROL SCHOOLS AT THE END OF THE FOUR-YEAR PERIOD, SEPTEMBER, 1921

The length of time that it would take the Control Schools to equal the achievement of the Experimental School is expressed in the fractional part of a year. The rate of the Control Schools is used as the basis in all cases. The degree of superiority of the Experimental School over the Control Schools is expressed as follows for the ten functions:

FUNCTIONS	TIME IN YEARS
Penmanship . . . . .	.21
Spelling . . . . .	.04
Reading . . . . .	.17
Addition . . . . .	.20
Subtraction . . . . .	.56
Multiplication . . . . .	.19
Division . . . . .	.06
Geography	1.04
American History . . . . .	.90
Composition . . . . .	.45
Total number of points favoring the Experimental School	3.820
Total number of points favoring the Control Schools	0.000
Average equated difference . . . . .	.382

1. The average equated difference is .382, which indicates that it would take the Control Schools that fractional part of a school year further working at their present rate to attain the same amount of achievement already attained by the Experimental School.

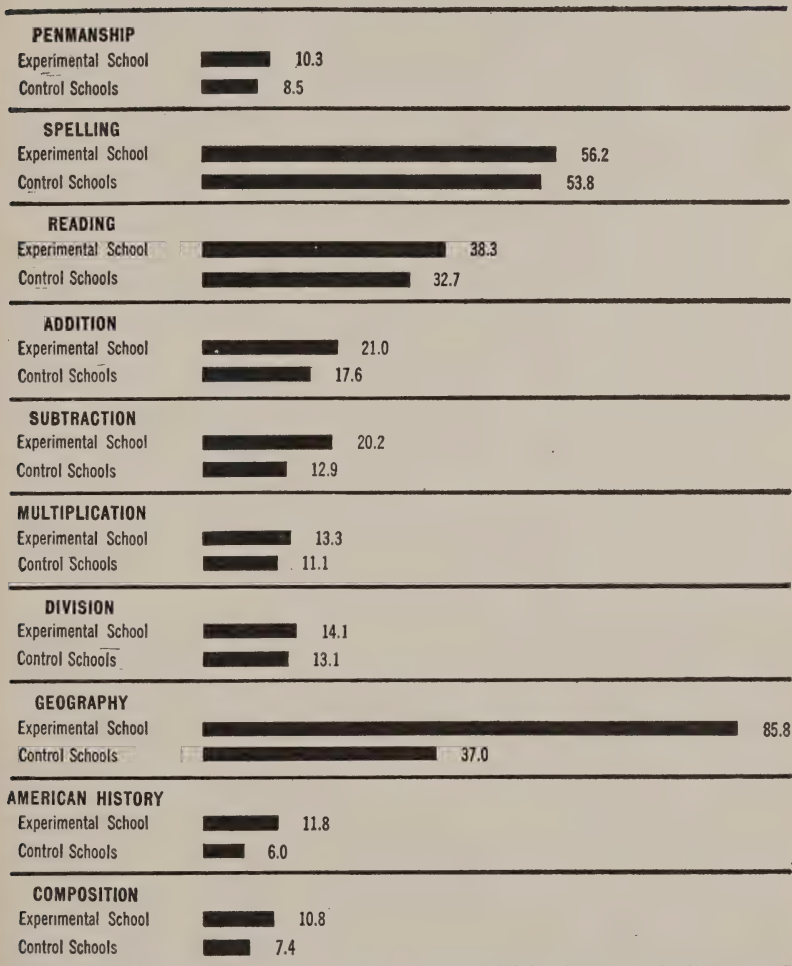


CHART IV. Comparison of the mean achievement for all grades of the Experimental and Control Schools in each function at the end of the four-year period.

2. Summary of Changes in Common Facts and Skills

By all of the methods of comparisons shown in Tables IV to XXIII inclusive, the outcomes of the Experimental School in terms of common facts and skills when compared with the Control Schools and National Standards are as follows:

1. Of sixty-eight median achievement scores the Experimental School was superior in all when compared with the Control Schools (Table XII).
2. Of fifty-seven median achievement scores the Experimental School was superior in thirty-six when compared with the National Standards (Table XII).
3. The mean achievement of the Experimental School when expressed in terms of the achievement of the Control Schools was 138.1% (Table XII).
4. The mean achievement of the Experimental School when expressed in terms of the achievement represented by the National Standards was 110.8% (Table XII).
5. The equated difference between the Experimental and Control Schools was .382 of a year and favors the Experimental School. This indicates that it would take the Control Schools that fractional part of a school year to reach the same point of achievement already attained by the Experimental School.

II. ATTITUDES TOWARD THE SCHOOL AND EDUCATION

1. Changes in Attitudes toward the School and Education

Most competent judges would readily agree that the primary outcome of any school is its psychological effect upon pupils and parents. They would quite generally agree that if the school failed to build in its pupils and parents attitudes favorable toward further education it had failed most signally at a vital point if not in its chief mission. In order to determine to what extent a

curriculum selected directly from the purposes of boys and girls, measures up to this generally accepted expectation, a study is made in the following tables of certain indications of the attitudes of pupils and parents toward both the Experimental and Control Schools. Table XXIV includes such pupil items as school enrollment, regular school attendance, tardiness, truancy, corporal punishment, pupils attending school throughout the term, graduates, and pupils entering high school. Similarly, Table XXV includes such parent items as visiting the school during the year, attendance at special school day programs, use of school apparatus, requests for information in solution of farm problems, annual school meeting attendance, voting for the maximum teacher and improvement levies, compulsory school law violations, and efforts in the establishment of a rural high school. In case of Table XXIV the teachers were required by law to keep records for all items. For Table XXV the first four items were kept by the teachers, the first two only being required by law. The last five items were kept by the district clerk according to law. In each instance the writer furnished the teachers and district clerks with records for recording these items adequately. Moreover, he inspected the records from time to time in order to determine the extent of accuracy exercised in recording the information. Much care was exercised in this connection in order to secure the most reliable data possible for the study.

The data presented in this study were taken by the writer personally from the records of the Experimental and Control Schools at the beginning of the experiment in 1917 and at the end in 1921. That is, the items were determined in the early days of September for both groups. This was followed by four years of contrasted school procedure as described in Chapters II and III. The items measured in 1917 were again similarly determined in the early part of September, 1921, for both groups. The improvement made by the two groups in each item, expressed in percentage terms, is computed by subtracting the 1917 measurement from the 1921 measurement. The succeeding

TABLE XXIV

COMPARISON OF CHANGES IN EIGHT ORDINARY ATTITUDES TOWARD THE SCHOOL AND EDUCATION FOR ALL GRADES OF THE EXPERIMENTAL AND CONTROL SCHOOLS FOR THE FOUR-YEAR PERIOD ENDING SEPTEMBER, 1921

ATTITUDES OF PUPILS	1917-1918		1920-1921		CHANGE ¹	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of pupils enumerated in district enrolled in school . . .	72.1	70.2	76.9	100.0	4.8	29.8
Per cent of pupils enrolled attending school every day . . .	2.3	2.9	8.2	96.0	5.9	93.1
Per cent of pupils tardy eight or more times during the year . .	97.0	95.0	91.0	3.0	6.0	92.0
Per cent of pupils playing truant one or more times during the year	18.0	28.0	11.0	2.5	7.0	25.5
Per cent of pupils suffering corporal punishment one or more times during the year	51.0	59.0	36.0	2.5	15.0	56.5
Per cent of pupils enrolling that remain in school throughout the entire school year	31.0	24.0	33.0	100.0	2.0	76.0
Per cent of pupils enrolled in eighth grade graduating during the year	16.6	14.2	27.3	100.0	10.7	85.8
Per cent of eighth-grade pupils entering high school	15.6	14.2	25.0	100.0	8.4	85.8

¹ The change in each instance is computed by subtracting the 1917 measurement from the 1921 measurement.

tables propose to answer to some extent the following very pertinent educational questions:

1. What changes, if any, were there in the attitudes of the pupils of both the Experimental and Control Schools, during the operation of the experiment, toward the school and education?
2. What changes, if any, were there in the attitudes of the parents of both the Experimental and Control Schools during the operation of the experiment, toward the school and education?

2. Summary of Attitudes of Boys and Girls

1. The Experimental School improved its percentage of enrollment of pupils during the four-year period 29.8 as against 4.8 for the Control Schools.
2. The percentage of pupils attending the Experimental School every day increased 93.1 as against 5.9 for the Control Schools.
3. The Experimental School decreased its percentage of tardiness of pupils 92 as against 6 for the Control Schools.
4. The percentage of corporal punishment was decreased 56.5 in the Experimental School as against 15 for the Control Schools.
5. The Experimental School improved 88.8 in the percentage of the pupils held in the upper grades in school until they had finished the elementary course of study as against 10.7 for the Control Schools.
6. The Experimental School improved 76 in the percentage of its pupils held in school throughout the entire school year as against 2 for the Control Schools.
7. In percentage truancy the Experimental School decreased 25.5 as against 7 for the Control Schools.
8. The Experimental School improved 85.8 in the percentage of its graduates sent on to high school as against 8.4 for the Control Schools.

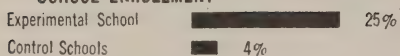
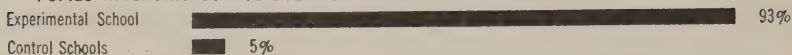
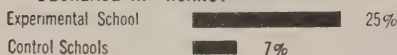
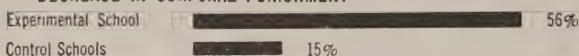
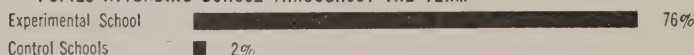
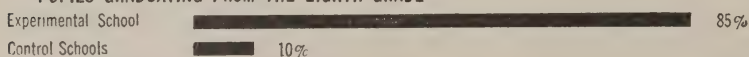
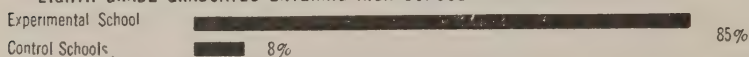
SCHOOL ENROLLMENT**PUPILS ATTENDING SCHOOL EVERY DAY****DECREASE IN SCHOOL TARDINESS****DECREASE IN TRUANCY****DECREASE IN CORPORAL PUNISHMENT****PUPILS ATTENDING SCHOOL THROUGHOUT THE TERM****PUPILS GRADUATING FROM THE EIGHTH GRADE****EIGHTH GRADE GRADUATES ENTERING HIGH SCHOOL**

CHART V. Comparison of changes in eight ordinary attitudes toward the school and education for all grades of the Experimental and Control Schools at the end of the four-year period.

TABLE XXV

COMPARISON OF CHANGES IN NINE ORDINARY ATTITUDES OF PARENTS TOWARD THE SCHOOL AND EDUCATION FOR THE FOUR-YEAR PERIOD ENDING SEPTEMBER, 1921



ATTITUDES OF PARENTS	1917-1918		1920-1921		CHANGE	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of parents visiting the school during the school year ¹ .	4.6	2.0	10.0	92.0	5.4	90.0
Per cent of parents visiting the school on special day programs during the school year	10.4	8.0	26.2	91.0	15.8	83.0
Per cent of parents using the school apparatus and school library for testing milk and seed corn, canning fruit, etc.	6.6	5.0	20.0	63.0	13.4	58.0
Per cent of parents asking the school for assistance in the solution of farm problems (testing seed corn, canning fruits, testing milk, and testing soils) . .	3.2	4.1	21.8	66.9	18.6	62.8
Per cent of voters attending the Annual School Meeting . . .	29.0	27.0	41.0	98.0	12.0	71.0
Per cent of voters voting at the Annual School Meeting for the extra school improvement levy of twenty-five cents	3.4	5.6	32.6	87.0	29.2	82.4
Per cent of voters voting at the Annual School Meeting for the maximum teacher's levy . . .	7.0	11.0	37.0	89.0	30.0	78.0
Per cent of parents violating the compulsory school law during the school year	26.0	18.0	22.0	2.0	4.0	16.0
Per cent of parents voting in favor of a consolidated rural high school during the year . . .	9.0	7.0	17.0	98.0	8.0	91.0

¹ This does not include the night community meetings held at the school building.

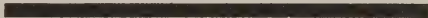

3. Summary of Attitudes of Parents

1. The attitude of parents, especially mothers, toward the school is, very probably, indicated by the number of times that they visit the school for purposes of observing the work of the children and coöperating with the teacher relative to special difficulties connected with the education of the children. The Experimental School shows an improvement of 90% in such an interest as against 5.4% improvement for the Control Schools.
2. The attitude of parents, especially fathers, toward educating their children is very likely measured by their attitude toward voting school tax levies, especially maximum tax levies for teacher's salary and school improvements. The Experimental School shows an improvement of 78% in the former and 82.4% in the latter as against an improvement of 30% and 29.2% for the Control Schools.
3. The attitude of parents toward the school as a positive force in rendering community service is to some extent indicated by their interest in seeking the assistance of school children and the teacher in the solution of immediate home and community problems. The Experimental School made appreciable progress along this line — 62.8% as against 18.6% for the Control Schools.
4. The number of violations of the compulsory school law is another index of parents' attitude toward educating their children. The Experimental School improved 16% along this line as against 4% for the Control Schools.
5. Another measure of parents' attitude toward the school is shown by their attendance at the Annual School Meeting. The Experimental School improved in this respect 71% as against an improvement of 12% for the Control Schools.
6. The attitudes of parents toward the school as a source of new ideas and a place for wholesome recreation is probably indicated by visiting the school on special day programs.

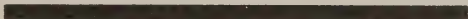

PARENTS VISITING THE SCHOOL

Experimental School		90%
Control Schools		5%

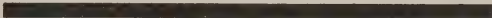
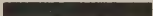
ATTENDANCE AT ANNUAL SCHOOL MEETING

Experimental School		71%
Control Schools		12%

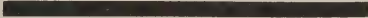

VOTES FOR THE MAXIMUM TEACHER LEVY

Experimental School		78%
Control Schools		30%



VOTES FOR THE EXTRA SCHOOL IMPROVEMENT LEVY

Experimental School		82%
Control Schools		25%

PARENTS USING THE SCHOOL IN SOLUTION OF FARM PROBLEMS

Experimental School		62%
Control Schools		18%

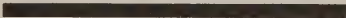

DECREASE IN NUMBER OF VIOLATIONS OF COMPULSORY SCHOOL LAW

Experimental School		16%
Control Schools		4%

PARENTS VISITING THE SCHOOL ON SPECIAL DAY PROGRAMS

Experimental School		83%
Control Schools		15%

PARENTS USING SCHOOL APPARATUS AND SCHOOL LIBRARY

Experimental School		58%
Control Schools		13%

VOTES FOR THE ESTABLISHMENT OF A RURAL HIGH SCHOOL

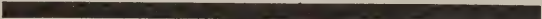

Experimental School		91%
Control Schools		8%

CHART VI. Comparison of changes in nine ordinary attitudes of parents toward the school and education at the end of the four-year period.

The Experimental School shows an appreciable improvement in this respect — 83% as against an improvement of 15.8% for the Control Schools.

7. Parents' use of the school apparatus, library, and building in solving immediate home and farm problems probably is another measure of their attitude toward the school as an agency for the improvement of life outside of the school. The Experimental School shows a progress of 58% as against 13.8% for the Control Schools.
8. Probably the most reliable measure of parents' attitude toward giving their children an adequate education is indicated by their attitude toward establishing a rural consolidated high school. The Experimental School made marked improvement in this respect, being 91% as against an improvement of 8% for the Control Schools.

4. General Summary of Changes in Attitudes toward the School and Education

A reference to Table XXIV indicates that the nine ordinary attitudes toward the school and education studied in this experiment for both the Experimental and Control Schools were practically the same at the beginning of the school year 1917. A very decided divergence in these attitudes is to be found between these schools for the 1921 measurements. The particular changes in these attitudes were 29.8% for the Experimental School and 4.8% for the Control Schools in enrollment; 93.1% and 5.9% in pupils attending school every day; 92.0% and 6.0% in school tardiness; 25.5% and 7.0% in truancy; 56.5% and 15.0% in corporal punishment; 76.0% and 2.0% in pupils remaining in school throughout the entire time; 85.8% and 10.7% in pupils graduating finishing the eighth grade; and 85.8% and 8.4% in eighth-grade graduates entering high school.

Table XXV indicates that the nine ordinary attitudes of the parents toward the school and education studied in this experi-

ment were practically the same at the beginning of the school year 1917. A very marked divergence appears between these schools for the 1921 measurements. The particular changes in these attitudes were 90% for the Experimental School and 5.4% for the Control Schools in number of parents visiting the school; 71% and 12% in number of voters attending the Annual School Meeting; 78% and 30% in number of parents voting the maximum teacher levy; 82.4% and 29.2% in number of parents voting for an extra school improvement levy; 62.8% and 18.6% in the use of the school in solving farm and home problems; 16% and 4% in number of parents violating the compulsory school laws; 83% and 15.8% in number of parents participating in special school programs; 58.0% and 13.4% in number of parents using the school library and apparatus; and 91.6% and 8% in number of votes registered by parents for the establishment of a rural high school.

III. CHANGES IN COMMUNITY LIFE

1. Purpose of This Study

In theory at least most people quite generally agree that the school should exert a positive influence upon the conduct of children and parents in community life. At present this theory of education is for the most part confined to verbal discussion and has not yet been translated into actual concrete practice. Outside of a few experimental schools no serious attempt has been made to measure the influence of the school upon the immediate behavior of pupils and parents in life outside of the school. School measures for the most part up to the present time have been largely concerned with the efficiency of pupils in arithmetic, reading, and writing isolated from their purposes in real life. What boys and girls do and how well they function in life outside of the school are not revealed by these tests.¹ Yet most people

¹ Meriam, J. L., *Child Life and the Curriculum*, Chapter XIX.

would very generally agree, at least in theory, that the efficiency of the school should be measured in terms of the acts of pupils in real life rather than in terms of these traditional school arts. In order to find out as accurately as possible to what extent a curriculum selected directly from the purposes of boys and girls realizes this generally accepted theory of education, a study was made of the conduct of pupils and parents in life outside of both the Experimental and Control Schools.

The results of this study are presented in the following tables. The data were secured by means of two surveys conducted by the writer personally. One survey was made at the beginning of the experiment in 1917 and the other at the termination in 1921. In the items reported in Tables XXVI, XXVII, and XXVIII objective records were devised for obtaining the 1921 data. In some instances no objective records were procurable for obtaining the 1917 data and in such instances the writer had to depend upon the judgment of the parents. Much care was exercised in each instance in order to secure the most reliable data possible. However, it should be observed that the measures used were crude as compared with those employed in measuring the common facts and skills. They were, moreover, less reliable, since the subjective element entered in an appreciably different manner and degree. The succeeding tables propose to answer to some extent the very pertinent educational questions:

1. What changes, if any, were there in the conduct of the boys and girls in life outside of the school during the period of the experiment?
2. What changes, if any, were there in the conduct of the parents in the home and community during the period of the experiment?
3. What changes, if any, were there in the common community conveniences of these districts during the period of the experiment?

TABLE XXVI

COMPARISON OF CHANGES IN TWELVE ORDINARY PHASES OF CONDUCT IN LIFE OUTSIDE OF THE SCHOOL FOR ALL GRADES OF THE EXPERIMENTAL AND CONTROL SCHOOLS FOR THE FOUR-YEAR PERIOD ENDING SEPTEMBER, 1921

ACTIVITIES	1917-1918		1917-1918		CHANGE	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of children of district reading twelve or more story books at home during the year ¹	3.3	2.3	8.3	88.0	5.0	85.7
Per cent of children reading one or more daily newspapers in the homes of the district . .	6.0	4.0	11.0	66.0	5.0	62.0
Per cent of children studying instrumental music (piano, organ, violin) in the homes of the district during the year .	2.0	3.0	5.0	42.0	3.0	39.0
Per cent of children of district participating in the following community activities during the year: community fair, community play day, and celebration of holidays	0.0	0.0	0.0	100.0	0.0	100.0
Per cent of children engaging in two or more social parties (story, music, game, and birthday) in the homes of the district during the year . . .	8.3	2.5	21.3	69.2	13.0	66.7
Per cent of children of district engaging in one or more clubs (pig, chicken, corn, garden, potato, and cantaloupe) during the school vacation . .	3.3	2.2	10.0	71.0	6.7	69.8
Per cent of children of district reading six or more story books at home during the school vacation ²	3.3	2.2	11.2	73.0	7.9	70.8

¹ Story books on travel, biography, history, and adventure. Does not include the school vacation.

² Story books on travel, fiction, biography, and adventure.

TABLE XXVI—*Continued*

ACTIVITIES	1917-1918		1917-1918		CHANGE	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of children of district reading one or more of the following in their homes during the year: <i>Little Folks' Magazine, St. Nicholas, American Boy, Youth's Companion, Literary Digest, and Saturday Evening Post</i>	1.7	2.2	24.2	68.0	22.5	65.8
Per cent of children of district practicing in the homes during the year the following common health habits: brushing the teeth daily, putting handkerchief over nose when sneezing and mouth when coughing, washing the hands before eating each meal, sleeping with a bedroom window up, eating fruits and vegetables daily, bathing the body weekly, eating meals regularly, and sleeping ten hours each night	8.0	11.0	11.0	92.0	3.0	81.0
Per cent of children of district stricken during the year with one or more of the common children's diseases (bad colds, mumps, typhoid, pneumonia, and measles)	58.0	44.0	33.0	9.0	25.0	35.0
Per cent of children of district participating in one or more of the following games at home during the year: basket ball, town ball, hand ball, volley ball, baseball, tennis, croquet	5.0	8.1	35.0	93.0	30.0	84.9
Per cent of children of district saving ten or more dollars from earnings made during the school vacation	3.0	5.0	5.0	73.0	2.0	68.0

2. Summary of Changes in Conduct of Boys and Girls

The above table indicates that the twelve ordinary phases of conduct of pupils in life outside of the school studied in this experiment were practically the same for both the Experimental and Control Schools at the beginning of the school year 1917. A very marked divergence in these phases of conduct of pupils is to be found between these schools for the 1921 measurements. The particular improvements were 85.7% for the Experimental School and 5% for the Control Schools in the number of story books read in the homes during the regular school year in addition to the school work; 62% and 5% in the number of children reading one or more daily newspapers in the homes; 39% and 3% in number of children studying instrumental music; 100% and 0% in number of children participating in community activities; 66.7% and 13% in number of children engaging in social parties in the homes; 69.8% and 6.7% in number of children carrying on project work at home during the school vacation; 70.8% and 7.9% in number of children reading six or more story books during the school vacation; 65.8% and 22.5% in number of children reading one or more magazines in the homes; 81% and 3% in number of children practicing the ordinary health habits in the homes; 35% and 25% in less number of children attacked by the common diseases; 84.9% and 30% in number of children participating in games at home; and 68% and 2% in number of children saving ten or more dollars from earnings made at home during the school vacation.

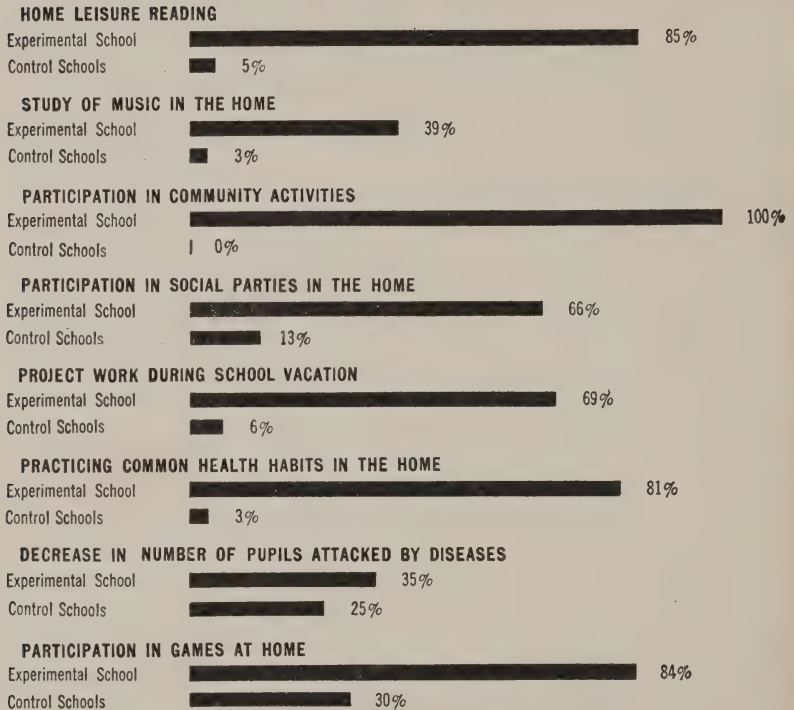


CHART VII. Comparison of changes in eight ordinary phases of conduct in life outside of the school for all grades at the end of the four-year period.

TABLE XXVII

COMPARISON OF CHANGES IN FOURTEEN ORDINARY PHASES OF CONDUCT IN COMMUNITY LIFE OF THE PARENTS OF THE EXPERIMENTAL AND CONTROL SCHOOLS FOR THE FOUR-YEAR PERIOD ENDING SEPTEMBER, 1921

ACTIVITIES	1917-1918		1920-1921		CHANGE	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of parents of district reading one or more farm journals .	5.0	2.0	8.8	98.0	3.8	96.0
Per cent of parents of district reading six or more books on travel, fiction, biography, and adventure during the year ¹	1.6	2.2	3.6	52.0	2.0	49.8
Per cent of parents of district reading one or more daily newspapers	25.0	22.6	31.6	79.0	6.6	56.4
Per cent of parents of district attending regularly the night community meetings during the year	21.6	20.4	46.6	96.0	25.0	75.6
Per cent of parents of district participating in one or more of the following children's community activities: community fair, community play day, and community celebration of holidays . .	0.0	0.0	0.0	91.0	0.0	91.0
Per cent of farmers of district testing seed corn before planting .	6.2	5.9	27.2	54.0	21.0	48.1
Per cent of farmers of district testing milk of dairy cows for butter fat	1.6	2.2	18.6	61.0	17.0	58.8
Per cent of farmers of district changing from mixed type of chickens to thoroughbred . .	5.0	2.0	12.2	33.0	7.2	31.0
Per cent of farmers of district changing from mixed type of seed corn to pure type . . .	5.0	2.0	14.4	39.0	9.4	37.0

¹ These books were withdrawn from the school library by the parents for home leisure reading.

TABLE XXVII—*Continued*

ACTIVITIES	1917-1918		1920-1921		CHANGE	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of farmers of district changing from mixed type of dairy cows to thoroughbred type	5.0	2.0	10.0	25.0	5.0	23
Per cent of farmers of district reading six or more Farmers Bulletins (Seed Corn Testing, Dairying, Cooking, etc.)	3.3	2.2	5.0	52.0	1.7	49.8
Per cent of farmers of district reading one or more of the following in the homes: <i>Saturday Evening Post</i> , <i>Literary Digest</i> , <i>Country Gentleman</i>	1.6	2.2	10.0	39.0	8.4	36.8
Per cent of farmers of district reading one or more of the county papers during the year . . .	20.0	21.0	30.0	80.0	10.0	59.9
Per cent of parents, of district stricken with one or more contagious diseases (typhoid, pneumonia, etc.) during the year .	18.2	25.0	13.3	5.0	4.9	20.0

3. Summary of Changes in Conduct of Parents

The above table indicates that the fifteen ordinary phases of conduct of parents in the home and community studied in this experiment were practically the same for both the Experimental and Control Schools at the beginning of the school year 1917. A very decided divergence appears between these schools for the 1921 measures. The particular improvements in these activities were 96% for the Experimental School and 3.8% for the Control Schools in number of parents reading farm journals; 49.6% and 2% in home leisure reading of parents; 56.4% and 6.6% in number of parents reading daily newspaper; 75.6% and 25% in number of parents attending regularly night community meetings; 91% and 0% in number of parents participating in children's com-

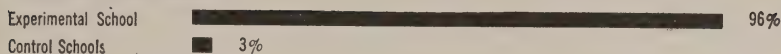
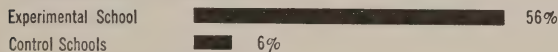
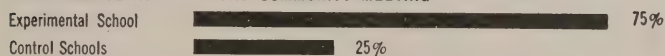
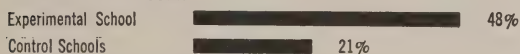
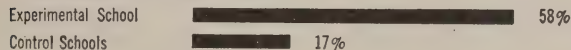
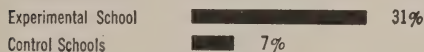
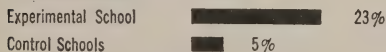
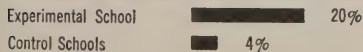
READING FARM JOURNAL**READING DAILY NEWSPAPER****ATTENDANCE AT THE NIGHT COMMUNITY MEETING****PARTICIPATION IN COMMUNITY FAIR AND COMMUNITY PLAY DAY****TESTING SEED CORN****TESTING MILK OF DAIRY COW****THOROUGHbred POULTRY****THOROUGHbred DAIRY COW****DECREASE IN NUMBER OF PARENTS STRICKEN WITH DISEASE**

CHART VIII. Comparison of changes in nine ordinary phases of conduct of parents in community life at the end of the four-year period.

munity fairs, community play days, and community celebration of holidays; 48.1% and 21% in number of farmers testing seed corn before planting in the spring; 58.8% and 17% in number of farmers testing milk of dairy cows for butter fat; 31% and 7.2% in number of farmers changing from mixed type of chickens to thoroughbred type; 37% and 9.4% in number of farmers changing from mixed type of seed corn to pure type; 23% and 5% in number of farmers changing from mixed type of dairy cows to thoroughbred type; 49.8% and 1.7% in number of farmers reading farmers' bulletins on farm problems; 36.8% and 8.4% in number of farmers reading magazines in homes; 59.9% and 10% in number of farmers reading the county papers; and 20% and 4.9% in less number of parents stricken with contagious diseases.

TABLE XXVIII

COMPARISON OF CHANGES IN TEN ORDINARY COMMUNITY CONVENIENCES OF THE EXPERIMENTAL AND CONTROL SCHOOLS DISTRICTS FOR THE FOUR-YEAR PERIOD ENDING SEPTEMBER, 1921

CONVENIENCES	1917-1918		1920-1921		CHANGE	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of homes in the district taking one or more daily newspapers	25.0	22.6	31.6	79.0	6.6	57.4
Per cent of homes in the district taking one or more farm journals	5.0	4.0	8.8	98.0	3.8	94.0
Per cent of homes in the district taking one or more county papers	20.0	21.0	25.0	70.0	5.0	59.0
Per cent of homes in the district taking two or more of the following magazines: <i>Literary Digest</i> , <i>Saturday Evening Post</i> , <i>Ladies Home Journal</i> , <i>Little Folks</i> , <i>St. Nicholas</i> , and <i>Youth's Companion</i>	1.6	2.2	8.3	40.0	6.7	37.8

TABLE XXVIII—*Continued*

CONVENIENCES	1917-1918		1920-1921		CHANGE	
	(C)	(E)	(C)	(E)	(C)	(E)
Per cent of homes in the district having a library of seventy-five or more books	5.0	4.2	8.3	55.0	3.3	50.8
Per cent of homes in the district having screens to the doors and windows	61.0	59.0	67.0	100.0	6.0	41.0
Per cent of homes in the district having yards, lawns, flowers, trees, and vines	20.0	15.0	30.0	80.0	10.0	65.0
Per cent of homes in the district equipped with the following home conveniences: fly trap, flyswatter, canning equipment, bookcase, library table, paper rack, ironing board, washing bench, window ventilators, and cooking aprons	12.9	13.2	37.7	98.1	24.8	84.9
Per cent of homes in the district having playground and equipment for one or more of the following games: baseball, basket ball, tether ball, tennis, volley ball, croquet	3.3	2.2	8.3	40.0	5.0	47.8
Per cent of homes in the district having one or more musical instruments (victrola, piano, organ, violin)	10.0	7.7	15.0	42.2	5.0	34.5

4. Summary of Changes in Community Conveniences

The above table indicates that the ten ordinary community conveniences studied in this experiment were practically the same for both the Experimental and Control Schools at the beginning of the school year 1917. A very marked divergence in the improvement of these conveniences appears between these schools

for the 1921 measurements. The particular improvements were 57.4% for the Experimental School and 6.6% for the Control Schools in number of homes taking daily newspapers; 94% and 3.8% in number of homes taking farm journals; 59% and 5% in number of homes taking one or more county newspapers; 37.8% and 6.7% in number of homes taking two or more magazines; 50.8% and 3.3% in number of homes having a library; 41% and 6% in number of homes having screens to the doors and windows; 65% and 10% in number of homes having beautified surroundings; 84.9% and 24.8% in number of homes having ordinary labor-saving conveniences; 47.8% and 5% in number of homes having playgrounds and apparatus for children's games; and 34.5% and 5% in number of homes having musical instruments.

5. General Summary of Changes in Community Life

The foregoing data furnish concrete evidence that the isolation of the Experimental School from its community, which existed before 1917, had been for the most part broken down by the year 1921. The school had changed from "a ragged beggar sleeping" beside the road into a veritable social center active in the improvement of community life. The Control Schools on the other hand made very little progress during this period in overcoming their isolation, for the obvious reason that this weakness for the most part was inherent in the curriculum used in these schools. A study of the ordinary activities in life outside of the school listed in Tables XXVI, XXVII, and XXVIII in light of the Control School Curriculum, given in Chapter II, reveals the very interesting fact that there is practically no correlation whatever between what people do outside of the school and what pupils do inside. The isolation is seemingly meant to be, and it is for the most part exceedingly well planned in the type of work that the children do in these schools. The obvious conclusion is that what little progress was made in these community activities could hardly be attributed to the influence of these schools, but more likely to the

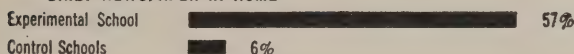
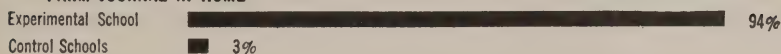
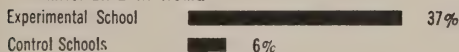
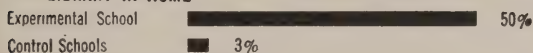
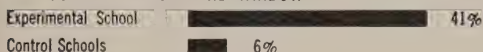
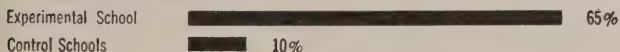
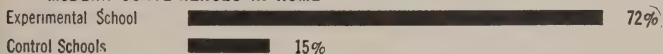
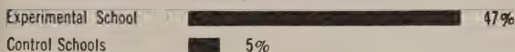
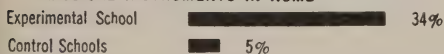
DAILY NEWSPAPER IN HOME**FARM JOURNAL IN HOME****MAGAZINE IN HOME****LIBRARY IN HOME****SCREEN TO DOOR AND WINDOW****BEAUTIFIED HOME YARD****MODERN CONVENIENCES IN HOME****HOME WITH PLAYGROUND AND APPARATUS****MUSICAL INSTRUMENTS IN HOME**

CHART IX. Comparison of changes in nine ordinary community conveniences of the Experimental and Control Schools districts at the end of the four-year period.

general agitation of forces outside of the districts. The Experimental School, on the other hand, improved more than fifty per cent in practically every activity studied. This might be expected, since the curriculum of this school was selected directly from the purposes of boys and girls in real life. The effective realization of these purposes not only influenced the immediate conduct of the pupils in life outside of the school, but, in addition, reacted positively upon the conduct of their parents in the home and community.

The concrete evidence of these changes in conduct is to be found in the particular improvements noted in Tables XXVI, XXVII, and XXVIII. For instance, such improvements as 85% in the home leisure reading of children, 39% in children's study of music in the homes, 100% in children's participation in community affairs, 69% in project work carried on by children at home during the school vacation, 35% decrease in number of children attacked by common diseases, and 81% in children's practice in the homes of the ordinary health habits, are some of the evidence of changed conduct on part of boys and girls noted in Table XXVI. On the other hand, such improvements as 20% decrease in number of parents stricken with common diseases, 96% in farmers' interest in current farm problems as treated in farm journals, 56.4% in parents' reading current happenings in daily newspapers, 75.6% in number of parents attending children's (night) community meetings at the school building, 91% in parents' participation in such children's community activities as community fairs, community play days, etc., 31% in securing a better type of poultry, 48% in testing seed corn before planting, and 49.8% in the use of farmers' bulletins in solving current farm problems are some of the specific instances noted in Table XXVII of the marked change in the conduct of the parents of the Experimental School.

In addition to these decided changes in the conduct of children and parents, the community conveniences of this district underwent a similar change. Important among these noted in Table

XXVIII are 57% in number of home subscribers to daily newspapers, 94% in number of home subscribers to farm journals, 37% in number of magazines coming to the homes, 47% in homes having screens to doors and windows, 84.9% in homes equipped with ordinary labor-saving conveniences, 34% in homes having one or more musical instruments, and 50% in homes providing for libraries.

CHAPTER V

PRACTICABILITY OF THE EXPERIMENTAL SCHOOL

I. ATTITUDE OF PUBLIC SCHOOL TEACHERS

CHAPTER V. PRACTICABILITY OF THE EXPERIMENTAL SCHOOL

I. ATTITUDE OF PUBLIC SCHOOL TEACHERS

As a part of the supervisory plan of McDonald County, the one hundred and twenty teachers of that county spent at least two days each year observing the work of the Experimental School. In order to determine as accurately as possible the attitude of these teachers toward this school a questionnaire was prepared and submitted to each teacher. This questionnaire, given in Table XXIX, is open to all the influences that might act upon teachers serving under a superintendent who is himself openly and frankly interested in the work being appraised.

It should be observed that these visiting teachers were asked to freely criticize any phase of the school's work and to report any suggestions for improving it. As a result of this policy the teachers of the county made hundreds of worth-while suggestions and criticisms during the four years that the school was in operation. It is believed that the opinion of these teachers as a result of four years of observation of the work of the Experimental School and experimentation with the Experimental School Plan in their schools is a fair estimate, in addition to the outcomes of this school, of the general practicability of a curriculum selected directly from the purposes of boys and girls in real life.

TABLE XXIX

ATTITUDE OF ONE HUNDRED AND TWENTY PUBLIC SCHOOL TEACHERS TOWARD
THE PRACTICABILITY OF THE EXPERIMENTAL SCHOOL

QUESTIONS	ANSWERS	
1. Have you tried out project work as exemplified in the Experi- mental School in your school? .	No..... 8	7.0%
	Yes.....112	93.0%

TABLE XXIX—*Continued*

QUESTIONS	ANSWERS		
2. Did the project work that you tried out in your school as compared with the usual school work produce	Inferior results.....	0	
	About the same.....	8	7.0%
	Superior results.....	104	93.0%
3. How did the interest and responsiveness of your pupils compare in the project work that you tried out with the usual school work?	Inferior.....	0	
	About the same.....	0	
	Superior.....	112	100.0%
4. From conversations with your patrons, which type of work does a majority seem to favor? . .	Usual school work.....	30	26.8%
	Project work.....	82	73.2%
5. Do you feel that the administration (freedom in moving about, selecting and working out projects, free discussions, etc.) of project work as compared with the usual type of work is . .	More difficult.....	4	3.3%
	About the same.....	20	16.7%
	Less difficult.....	96	80.0%
6. From your experience in observation of and experimentation with the Experimental School Plan do you believe that it would work successfully in your school?	No.....	14	12.5%
	Yes.....	98	87.5%
7. From your observation, do you believe that the pupils of the Experimental School as compared with pupils of the usual type of school are	Less happy.....	0	
	About the same.....	2	1.4%
	Happier.....	118	99.6%
8. From your observation, do you believe that the pupils of the Experimental School as compared with the pupils of the usual type of school are . . .	Less self-reliant.....	0	
	About the same.....	6	4.0%
	More self-reliant.....	114	96.0%
9. From your observation, do you believe that the pupils of the Experimental School as compared with the pupils of the usual type of school are . . .	Less industrious.....	0	
	About the same.....	8	7.0%
	More industrious.....	112	93.0%

TABLE XXIX—*Concluded*

QUESTIONS	ANSWERS		
10. From your observation, do you believe that the pupils of the Experimental School as compared with the pupils of the usual type of school are . . .	Less interested.....	0	
	About the same.....	3	1.5%
	More interested and responsive.....	117	97.5%
11. From your observation, do you believe that the pupils of the Experimental School as compared with pupils of the usual type of school are developing .	Less socially.....	0	
	About the same.....	2	1.8%
	More socially.....	118	98.2%
12. From your observation, do you believe that the teacher's work in the Experimental School as compared with the work in the usual type of school is . . .	Less burdensome.....	118	96.0%
	About the same.....	2	1.6%
	More burdensome.....	2	1.6%
13. If you had your choice would you choose to teach in	Usual type of school...	1	1.0%
	Experimental School...	119	99.0%
	88% of the teachers stated that an additional room, a library adapted to child interests, and apparatus for child experimentation and construction were needed; 12% stated that no changes were needed.		
14. What changes, if any, in your present school building and equipment would make project teaching in your school more effective?			

1. Summary of the Attitude of Teachers

The replies from the one hundred and twenty teachers of McDonald County indicate an overwhelming sentiment favorable to the Experimental School Organization. Of the teachers 99% would prefer to teach in the Experimental School if given their choice, while only one teacher expressed a preference for the traditional school; 96% believe that the work of the Experimental School is less burdensome, 1.6% about the same as in the usual type of school, and 1.6% feel that it is more burdensome; 80% of

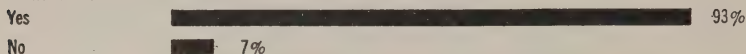
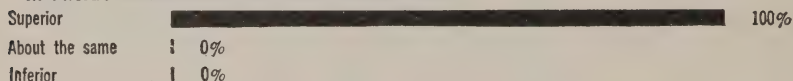
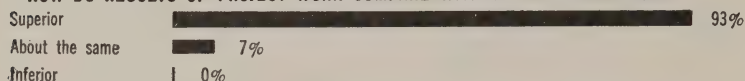
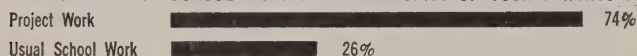
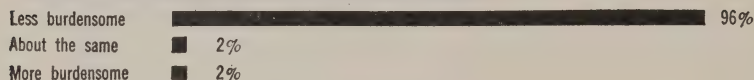
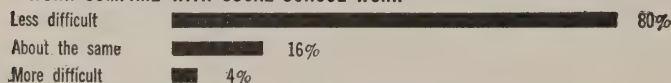
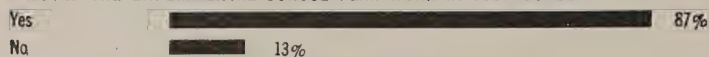
HAVE YOU TRIED OUT PROJECT WORK IN YOUR SCHOOL?**HOW DOES THE INTEREST OF YOUR PUPILS COMPARE IN PROJECT WORK WITH THE USUAL SCHOOL WORK?****HOW DO RESULTS OF PROJECT WORK COMPARE WITH USUAL SCHOOL WORK?****WHICH TYPE OF SCHOOL WORK DOES A MAJORITY OF YOUR PARENTS FAVOR?****HOW DOES THE TEACHER'S WORK IN THE EXPERIMENTAL SCHOOL COMPARE WITH WORK IN THE USUAL SCHOOL****HOW DOES THE ADMINISTRATION OF PROJECT WORK COMPARE WITH USUAL SCHOOL WORK****WOULD THE EXPERIMENTAL SCHOOL PLAN WORK IN YOUR SCHOOL?****IN WHICH TYPE OF SCHOOL WOULD YOU PREFER TO WORK?**

CHART X. Attitude of one hundred and twenty pupil school teachers toward the practicability of the Experimental School.

the teachers find the administration of the Experimental School Plan less difficult, 16% about the same, and 4% more difficult than the usual type of school organization; 99% of the teachers believe that the pupils of the Experimental School are happier than the pupils in the usual type of schools, while 1% believe that they are about the same; 96% of the teachers feel that the pupils of the Experimental School are more self-reliant than pupils in the traditional school, while 4% think that they are about the same; 93% of the teachers consider the pupils of the Experimental School more industrious and 7% consider them about the same as pupils in the usual school; 98% feel that the pupils of the Experimental School are developing more socially, and 97% notice that they are more interested in and responsive to their work than pupils of the usual type of school. Of the one hundred and twenty teachers, 93% experimented with the Experimental School Organization in their schools; 93% of the teachers who tried out the Experimental School Curriculum stated that it produced better results than did the curriculum that they had been using; 100% of these teachers report that project work is more interesting to the pupils and that the pupils responded to it much better than they did to the usual type of work; 73% find that the project work tried out in their schools was approved by the parents of their districts, while 27% report that their parents preferred the usual school work; 88% stated that an additional room, a library suited to child interest, and apparatus for child experimentation and construction would make project teaching much more effective in their schools; 87% report that in light of their experience the Experimental School Organization would work successfully in their schools, while 13% advised against using such an organization because of the attitude of parents and pupils, and lack of equipment.

CHAPTER VI

THE EXPERIMENTAL SCHOOL PLANT

- I. THE SCHOOL BUILDING AND EQUIPMENT
- II. THE SCHOOL LIBRARY
- III. PLAYGROUND EQUIPMENT



EXPERIMENTAL SCHOOL READING ROOM

CHAPTER VI. THE EXPERIMENTAL SCHOOL PLANT

I. THE SCHOOL BUILDING AND EQUIPMENT

The school building and equipment that are most conducive to effective realization of child purposes are for the most part similar to the building and equipment of the better home. Such a home is designed and furnished with a view to affording its occupants — parents and children — comfort, freedom in moving about, and opportunity to satisfy various purposes. The Experimental School building and equipment were selected and arranged in accordance with this principle. The building has two large rooms which are connected with folding doors. One room was used by all of the pupils for a reading room (quiet room), the other one was used for a workshop (noisy room).

1. The Reading Room Equipment

The reading room was furnished with chairs and tables fitted to the size of the children. The chairs and tables were arranged in such fashion as to secure the greatest possible comfort and freedom in moving about. The library cases were arranged on each side of the room. In addition to the regular school work the reading room was used for community meetings. Farmers gathered in this room weekly to discuss current social, political, and economic problems, and to participate in various leisure activities. The reading room had the following equipment in addition to the library listed elsewhere:

40 regular size chairs.	6 library size kindergarten tables.
20 regular kindergarten chairs.	6 stereographs and sets of pictures.
9 regular size library tables.	1 Victor Stereopticon and slides.

1 modern water fountain.	1 teacher's desk and equipment.
1 paper rack and papers. ¹	1 stereograph cabinet. ¹
1 Library Bureau System.	1 United States flag.
1 fish aquarium. ¹	1 project folder cabinet. ¹
1 Waterbury Heating System.	6 library cases and books.
1 story index. ¹	6 wall pictures.
1 bulletin board. ¹	1 case of wall maps.
1 filing cabinet for school records.	1 project bulletin board. ¹
	1 school clock.

2. The Workshop Equipment

The second room was used for a workshop. Here all projects were worked out. Group conferences, with participants seated in a circle, were held in this room. In addition, the workshop was used for community demonstrations in cooking, canning, seed corn testing, milk testing, and for serving refreshments at community night meetings. The workshop had the construction, experimentation, school luncheon, toilet, laundry, musical, and play equipments listed on the following pages.

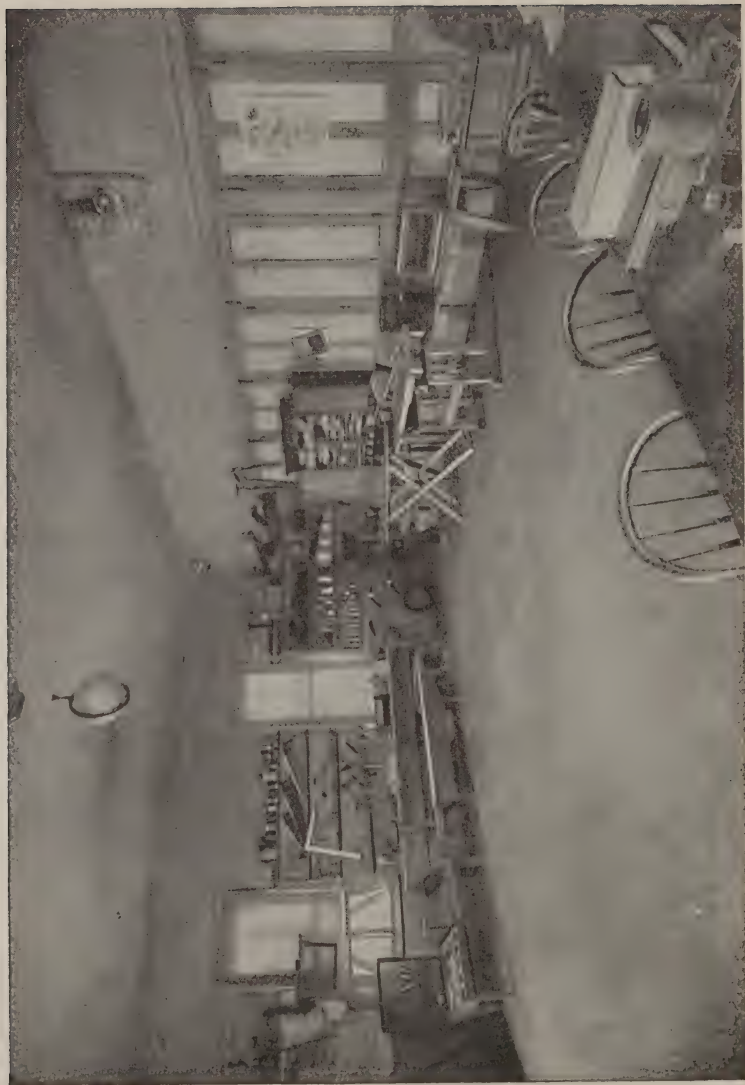
Construction Equipment

1 handsaw, six-point.	1 blacksmith's anvil.
1 handsaw, ten-point.	1 pair of tongs.
1 wood plane, fourteen-inch.	1 set of drill bits.
1 wood plane, eight-inch.	1 portable forge.
1 wood plane, four-inch.	1 grindstone.
2 claw hammers.	1 soldering outfit.
1 shingle hatchet.	1 blacksmith's vice.
1 marking gauge.	4 cold chisels.
1 steel square.	2 nail punches.
1 compass.	1 pair of tin shears.
1 set of wood chisels.	1 leather sewing vice.
1 ratchet brace and set of bits.	1 shoe cobbler's outfit.
1 saw filing set.	12 pair of small size scissors.
2 folding rules.	6 pair of regular size scissors.

¹ Made by pupils of the school.



EXPERIMENTAL SCHOOL READING ROOM ARRANGED FOR A COMMUNITY MEETING



EXPERIMENTAL SCHOOL WORKSHOP — WOOD, LEATHER, METAL, AND EXPERIMENTAL EQUIPMENT

2 screw drivers.	6 tape measures.
4 wood rasps.	12 sewing thimbles.
1 hand ax.	8 crocheting needles.
6 coupling saws.	3 packages of sewing needles.
3 keyhole saws.	1 sewing machine.
2 drawer knives.	8 small-size weaving looms. ¹
1 try square, six-inch.	2 large-size weaving looms. ¹
8 woodworking benches with vices.	1 hand printing set.

Experimental Equipment

1 spring balance.	2 centigrade thermometers.
1 Babcock milk tester.	1 soil tester.
2 gasoline burners.	1 box of red and blue litmus paper.
1 seed testing outfit.	3 dissecting knives.
6 germinating trays.	1 oil stove with three burners.
6 germinating glasses.	4 garden hoes.
1 canning equipment.	2 garden rakes.
1 dissecting microscope.	1 teakettle.
1 bucket sprayer.	1 dover egg beater.
1 experimental plot.	1 flour sieve.
1 telegraph outfit.	2 one-gallon stew pans.
4 telephone batteries.	1 rolling pin.
1 small-size dynamo.	1 biscuit cutter.
2 doorbells.	1 oil stove oven.
1 roll of electrical wire.	1 frying pan.
1 box of glass tubing.	2 bread pans.
2 Fahrenheit thermometers.	2 broilers.
	2 paring knives.

School Luncheon Equipment

42 soup bowls.	2 serving trays.
42 table napkins. ¹	2 garbage pails and covers.
42 knives and forks.	12 cooking aprons. ¹
42 teaspoons.	2 large-size dish pans.
42 regular size tumblers.	42 regular-size plates.

¹ Made by pupils of the school.

Toilet Equipment

42 washing towels. ¹	1 pair of hair clippers.
42 washing pans.	11 shoe polishing outfits.
42 hair combs.	1 box of chemicals for removing clothing stains.
6 large mirrors.	6 clothing brushes.

Laundry Equipment

1 three-burner oil stove.	1 washing bench. ¹
1 large-size wash boiler.	1 set of irons.
1 washing tub and washing board.	1 ironing board. ¹

Indoor Play Equipment

9 Roly Polys.	6 sets of Quoits.
9 Tenpins.	6 sets of Marbles.
1 indoor baseball set.	6 Rook Cards.
1 ball game set.	6 Flinch Cards.
9 cylinders.	1 punching bag.
9 bean bags.	1 pair of boxing gloves.
6 Checker boards. ¹	6 rubber balls.
6 Fox and Geese boards. ¹	2 easel blackboards.
6 sets of Dominoes.	

Musical Equipment

1 piano.	15 Bently's <i>Song Primer</i> .
1 phonograph and records. ²	15 Gaynor's <i>Songs of the Child World</i> .
50 songs and choruses for com- munity singing.	15 Moffat and Kidson's <i>Child Songs of Long Ago</i> .
15 Elliott's <i>Mother Goose Set to Music</i> .	15 Rays' <i>Songs for Little Children</i> .
12 <i>Busy Bee Song Books</i> .	1 Piano Instruction Book.
15 Smith's <i>Modern Music Primer</i> .	1 orchestra equipment.

¹ Made by pupils of the school.² List of records is given in Chapter III.



EXPERIMENTAL SCHOOL WORKSHOP — COOKING, LAUNDRY, WEAVING, TOILET, AND SEWING EQUIPMENT

Workshop Room Cabinets

1 construction equipment. ¹	1 dinner pail. ¹
1 experimentation equipment. ¹	1 hats, wraps, etc. ¹
1 toilet equipment. ¹	1 phonograph records. ¹
1 laundry equipment. ¹	1 educational exhibits. ¹
1 play equipment. ¹	

Educational Exhibits²

Skinner's Macaroni Products. Skinner Manufacturing Company, Omaha, Nebr.

Horlick's Malted Milk samples. Horlick's Malted Milk Company, Racine, Wis. (Two exhibits.)

Stages of Flour Making. Washburn-Crosby Company, Minneapolis.

Samples of Postum Cereal. Postum Cereal Company, Battle Creek, Mich.

Educational Exhibit of Cocoa and Chocolate. Walter Baker and Company, Dorchester, Mass.

Samples of Tea and Coffee. C. F. Blake Tea and Coffee Company, Battle Creek, Mich.

Pillsbury Milling Samples. Pillsbury Flour Mills, Minneapolis.

Samples of Kellogg Bran foods. Kellogg Food Company, Battle Creek, Mich.

Products from Corn. American Manufacturers Association of Products from Corn, Chicago.

Swift's Animal and Poultry Foods. Swift and Company, Kansas City.

Samples of Cheney Silks. Cheney Brothers, South Manchester, Conn.

Samples of Swift's Fertilizers. Swift and Company, Kansas City.

Corticelli Silk Culture Cabinet. Nonotuck Silk Company, Florence, Mass.

Petroleum Products. Standard Oil Company, Chicago.

Process of Manufacturing the Fleischer Yarns. S. B. and B. W. Fleischer, Philadelphia.

Samples of Barbour's Linen Thread. Linen Thread Company, 96 and 98 Franklin Street, New York.

Samples of Hardwood Clothes Pins. Escanoba Manufacturing Company, Escanoba, Mich.

Samples of Marble and Granite, etc. Vermont Marble Company, St. Louis.

Samples of American Manila Rope. St. Louis Cordage Mills, St. Louis.

Sample Balls of Binder Twine. International Harvester Company, Chicago.

¹ Made by pupils of the school.

² Ordered by pupils of the school during process of working out projects.

Samples of Flower Seeds. Springfield Seed Company, Springfield, Mo.
 Samples of Vegetable Seeds. Springfield Seed Company, Springfield, Mo.
 Pictures of Jersey Dairy Cattle. Jersey Dairy Association, Clifton, Vt.
 Pictures of Holstein Dairy Cattle. Holstein Dairy Association, Racine, Wis.

II. THE SCHOOL LIBRARY

The Experimental School Library consisted of books, bulletins, pictures, papers, and magazines. Only those books, bulletins, pictures, papers, and magazines that proved popular among the children during the four years of the experiment are included in these lists. It is interesting to compare these lists with the investigations of Dr. Fannie W. Dunn, *Interest Factors in Primary Reading Material* (Bureau of Publication, Teachers College, Columbia University), Dr. Arthur M. Jordan, *Children's Interests in Reading* (Bureau of Publication, Teachers College, Columbia University), and Dr. J. L. Meriam, *Child Life and the Curriculum* (World Book Company), page 487 (books used in the University Elementary School). The figure preceding each title represents the number of copies in the library.

I. Story Books ¹

2 *Æsop's Fables*.

1 Alcott — *Girl Stories*.

1 Alcott — *Little Women*.

1 Alcott — *Old Fashioned Girl*.

1 Alcott — *Under the Lilacs*.

1 Aldrich — *Story of a Bad Boy*.

1 Altsheler — *Horseman of the Plains*.

1 Altsheler — *Keepers of the Trail*.

1 Andersen — *Fairy Tales*.

1 Andrews — *Daddy Takes Us to the Circus*.

1 Andrews — *Little Red Riding Hood*.

1 Baker — *Children's First Book of Poetry*.

1 Bailey — *For the Children's Hour*.

¹ Chapter Ten gives a complete list of the particular stories selected by the pupils from these books.



ONE SIDE OF THE READING ROOM LIBRARY

- 1 Baldwin — *Fifty Famous Stories.*
- 1 Baldwin — *Old Greek Stories.*
- 1 Baldwin — *Old Stories of the East.*
- 1 Baldwin — *Old Wonder Stories.*
- 1 Baldwin — *Story of Roland.*
- 4 Bannerman — *Little Black Sambo.*
- 1 Bass — *Stories of Pioneer Life.*
- 1 Beckwith — *In Mythland.*
- 1 Bigham — *Stories of Mother Goose Village.*
- 1 Blaisdell — *Cherry Tree Children.*
- 1 Blaisdell — *Polly and Dolly.*
- 1 Boyle — *Outdoor Secrets.*
- 1 Brooks — *Story of Christopher Columbus.*
- 1 Brooks — *Life of Washington.*
- 1 Brooks — *Life of Lincoln.*
- 1 Brooks — *Story of the Pilgrims.*
- 1 Brooks — *Story of the First Thanksgiving.*
- 1 Browning — *Pied Piper of Hamelin.*
- 1 Bryant — *How to Tell Stories.*
- 1 Bryce — *That's Why Stories.*
- 1 Burnett — *Little Lord Fauntleroy.*
- 1 Burnett — *Sarah Crewe.*
- 1 Cable — *Famous Adventures and Prison Escapes of the Civil War.*
- 1 Canfield — *Boys of Rincorn Ranch.*
- 1 Chadwick — *Jack and the Bean Stalk.*
- 1 Chance — *Little Folks of Other Lands.*
- 1 Child — *Nature in Verse.*
- 1 Clark — *Doty Dimple and Prudy Keeping House.*
- 1 Clemens — *Tom Sawyer.*
- 1 Clemens — *Prince and the Pauper.*
- 1 Clemens — *Huckleberry Finn.*
- 1 Clemens — *Strenuous Adventure.*
- 1 Clemens — *Pudd'nhead Wilson.*
- 1 Cody — *Adventures of Buffalo Bill.*
- 1 Coe and Christie — *Story Hour Primer.*
- 1 Coe and Christie — *Story Hour Reader: Book One.*
- 1 Coe and Christie — *Story Hour Reader: Book Two.*
- 1 Coffin — *Boys of '61.*

- 2 Cooke — *Nature Myths*.
- 1 Cooper — *Last of the Mohicans*.
- 1 Cox — *Brownie Primer*.
- 1 Craik — *Fairy Book*.
- 1 Craik — *Little Lame Prince*.
- 1 Crothers — *Miss Muffet's Christmas Party*.
- 1 Defoe — *Robinson Crusoe*.
- 1 Deland — *Country Cousins*.
- 1 Deland — *Home Life and Mild Adventure*.
- 1 Dickens — *The Old Curiosity Shop*.
- 1 Dodge — *Hans Brinker*.
- 1 Dodge — *Rhymes and Jingles*.
- 1 Dodgson — *Alice's Adventures in Wonderland*.
- 1 Doyle — *Sherlock Holmes*.
- 1 Dumas — *The Three Musketeers*.
- 1 Dutton — *Stories of France*.
- 1 Earle — *Stage Coach and Tavern Days*.
- 1 Empey — *Over the Top*.
- 1 Ellis — *Hunters of the Ozarks*.
- 1 Eggleston — *Stories of American Life and Adventure*.
- 1 Eggleston — *Stories of Great Americans for Little Americans*.
- 1 Field — *Love Songs of Childhood*.
- 1 Foulke — *Twilight Stories*.
- 3 Grimm — *Fairy Tales*.
- 1 Grinnell — *Outdoor Life with Boat, Trap, and Gun*.
- 1 Grover — *Sunbonnet Babies Primer*.
- 1 Guerber — *Story of the Thirteen Colonies*.
- 2 Harris — *Uncle Remus Stories*.
- 1 Harris — *Why the Rabbit's Tail Is Short*.
- 2 Harrison — *In Storyland*.
- 1 Henty — *Adventure and War Series*.
- 1 Henty — *With Lee in Virginia*.
- 1 Hiawatha *Primer*.
- 1 Hill — *On the Trail of Grant and Lee*.
- 2 Holbrook — *Nature Myths*.
- 1 Horsford — *Stories of Our Holidays*.
- 1 Howliston — *Cat Tails and Other Tales*.
- 1 Hughes — *Tom Brown's School Days*.

- 1 Hule — *Stories of Inventions.*
- 1 Irving — *Legend of Sleepy Hollow.*
- 1 Irving — *Rip Van Winkle.*
- 1 Jacob — *Blue Bonnet's Ranch Party.*
- 1 Jacob — *School and Home (Joan's Jolly Vacation).*
- 1 Johnson — *Little Colonel's Christmas Party.*
- 1 Johnson — *Story of Kit Carson.*
- 1 Judd — *Classic Myths.*
- 1 Kelley — *Short Stories of Our Shy Neighbors.*
- 1 King — *Adventures of U. S. Soldiers.*
- 2 Kipling — *Just So Stories.*
- 1 Burchill, Ettinger, and Shimer — *Progressive Road to Reading, Story Steps.*
- 1 Burchill, Ettinger, and Shimer — *Progressive Road to Reading, Book One.*
- 1 Burchill, Ettinger, and Shimer — *Progressive Road to Reading, Book Two.*
- 1 Burchill, Ettinger, and Shimer — *Progressive Road to Reading, Book Three.*
- 1 Knipe — *Captain of the Eleven.*
- 1 Lamb — *Tales from Shakespeare.*
- 1 Lansing — *Jungle Primer.*
- 3 Lansing — *Rhymes and Stories.*
- 1 Lewis — *Story of Franklin.*
- 1 Lindsay — *More Mother Stories.*
- 1 Lodge — *Story of the Revolution.*
- 1 London — *Call of the Wild.*
- 1 Longfellow — *Courtship of Miles Standish.*
- 1 Longfellow — *Evangeline.*
- 1 Longfellow — *Poems.*
- 1 Lucia — *Peter and Polly.*
- 1 Mabie — *Fairy Tales Every Child Should Know.*
- 1 Mabie — *Norse Stories.*
- 1 Marshall — *Cat School.*
- 1 Martin — *Abie Ann and Emmy Lou.*
- 1 Mathews — *Pitcher Pollock.*
- 1 Maynard — *Life of Boone.*
- 1 McManus — *How the Fairies Came to America.*
- 3 *Mother Goose.*
- 1 Mowry — *Dave Crockett.*
- 1 Mulock — *Adventures of a Brownie.*
- 1 Nash — *Æsop and Mother Goose.*

- 1 O'Brien — *Outwitting the Hun.*
- 1 Olcott — *Good Stories for Great Holidays.*
- 3 O'Shea — *Nursery Classics.*
- 1 Perkins — *Belgian Twins.*
- 1 Perkins — *Dutch Twins.*
- 1 Perkins — *Eskimo Twins.*
- 1 Perkins — *Irish Twins.*
- 1 Perkins — *Japanese Twins.*
- 2 Potter — *Peter Rabbit.*
- 2 Poulson — *In the Child's World.*
- 1 Pratt — *Legends of the Red Children.*
- 1 Price — *Heroes of Myth.*
- 1 Prince — *Lads and Lassies of Other Lands.*
- 2 Radford — *King Arthur and His Knights.*
- 1 Rhead — *Robin Hood.*
- 2 Richards — *The Golden Windows.*
- 2 Richards — *Peggy.*
- 3 Richards — *The Pig Brother.*
- 1 Roosevelt — *Christmas of '76.*
- 1 Roosevelt — *Hero Tales from American History.*
- 1 Ruskin — *King of the Golden River.*
- 1 Scudder — *Book of Fables and Folk Stories.*
- 2 Scudder — *Fairy Stories and Fables.*
- 1 Sewell — *Black Beauty.*
- 3 Shaw — *Big People and Little People of Other Lands.*
- 1 Sherman — *Little Folks' Lyrics.*
- 1 Sims — *Child Literature.*
- 1 Smith — *In the Days of the Giants.*
- 1 Smith — *Little Eskimo.*
- 1 Stevenson — *Child's Garden of Verses.*
- 1 Stevenson — *Railroad Adventure.*
- 1 Stockton — *Fanciful Tales.*
- 1 Stockton — *The Christmas Truants.*
- 1 Stowe — *Uncle Tom's Cabin.*
- 1 Taggart — *Six Girls and Betty.*
- 1 Tanner — *Legends of the Red Man's Forest.*
- 1 Tappan — *When Knights Were Bold.*
- 1 Thaxter — *Stories and Poems for Children.*

- 1 Tomlinson — *Boys of the Revolution*.
- 1 Tomlinson — *Colonial Boys*.
- 1 Tomlinson — *Scouting with Daniel Boone*.
- 1 True — *Scouting with Washington*.
- 1 Turner — *Stories for Young Children*.
- 1 Turpin — *Honey Sweet*.
- 1 Vaile — *School and Home (Orcutt Girls)*.
- 1 Webster — *When Patty Went to College*.
- 1 Welsh — *Child Life in Tale and Fable*.
- 1 Welsh — *Rhymes and Stories*.
- 1 Wiggin — *Rebecca of Sunnybrook Farm*.
- 1 Wiggin and Smith — *Story Hour*.
- 1 Wilson — *Nature Reader, Book I*.
- 2 Wiltse — *Folk-Lore Stories and Proverbs*.
- 2 Wiltse — *Kindergarten Stories and Morning Talks*.
- 1 Wood — *Children's First Story Book*.
- 1 Woolsey — *Cross Patch and Other Stories*.
- 1 Woolsey — *Little Country Girl*.
- 1 Woolsey — *What Katy Did at School*.
- 1 Wyss — *Swiss Family*.

2. Excursion Books

- 6 Baskett — *The Story of the Fishes*.
- 6 Bass — *Animal Life*.
- 6 Bass — *Plant Life*.
- 4 Beard — *Curious Homes and Their Tenants*.
- 8 Beebe — *Picture Primer*.
- 6 Blanchan — *Birds Every Child Should Know*.
- 2 Brigham and McFarland — *Advanced Geography*.
- 4 Burroughs — *Birds and Beasts*.
- 4 Burroughs — *Squirrels and Other Fur-bearing Animals*.
- 4 Carpenter — *How People Travel*.
- 4 Carpenter — *How the World Is Clothed*.
- 4 Carpenter — *How the World Is Fed*.
- 4 Carpenter — *How the World Is Sheltered*.
- 2 Carpenter — *Geographical Readers (North America, South America, Asia, Europe, Africa, and Australia)*.

- 4 Carter — *Stories of Brave Dogs.*
- 4 Chamberlain — *How We Are Clothed.*
- 4 Chamberlain — *How We Are Fed.*
- 4 Chamberlain — *How We Are Sheltered.*
- 4 Chamberlain — *How We Travel.*
- 2 Chamberlain — *Continents and Their Peoples* (North America, South America, Europe, Asia, Africa and Australia).
- 2 Chandler — *In the Reign of the Coyote.*
- 3 Chase — *Friends of the World.*
- 3 Chase — *Plant Babies and Their Cradles.*
- 3 Chase and Chow — *Stories of Industry.*
- 1 Comstock — *Handbook of Nature Study.*
- 6 Dana — *How to Know Wild Flowers.*
- 4 Daring — *The Furniture People.*
- 3 Dunn — *The Community and the Citizen.*
- 4 Dutton — *In Field and Pasture.*
- 6 Dutton — *Trading and Exploring.*
- 4 Eddy — *Friends and Helpers.*
- 2 Gilmore — *Birds through the Year.*
- 2 Hodge — *Nature Study and Life.*
- 4 Hornaday — *Our Vanishing Wild Life.*
- 3 Hughes — *Community Civics.*
- 6 Ingersol — *Wild Neighbors.*
- 4 Jewett — *Good Health.*
- 4 Johnson — *Neighbors with Claws and Hoofs.*
- 2 Johnson — *Glimpses of the Animate World.*
- 4 Johnson — *Ocean and Inland Water Transportation.*
- 4 Keeler — *Our Native Trees.*
- 2 Kelly — *Short Stories of Our Shy Neighbors.*
- 6 Lane — *Industries of Today.*
- 3 Long — *The Way of Wood Folks.*
- 4 Marriott — *Uncle Sam's Business.*
- 6 McCarthy — *Familiar Fish — Their Habits and Capture.*
- 2 McMurry and Cook — *Songs of the Tree Top and Meadow.*
- 3 Merrill — *Our Country.*
- 3 Merrill — *Our Occupations.*
- 3 Merrill — *The Occupations of Man.*
- 8 Miller — *First Book of Birds.*

- 6 Morley — *Butterflies and Bees.*
- 2 Morris — *Home Life in All Lands.*
- 4 O'Shea and Kellogg — *Health and Cleanliness.*
- 4 O'Shea and Kellogg — *Health Habits.*
- 6 Parker — *Our Friends and Birds.*
- 4 Pierson — *Among the Farmyard People.*
- 4 Pierson — *Among the Forest People.*
- 4 Pierson — *Among the Meadow People.*
- 3 Rader — *Civil Government.*
- 6 Reed — *Bird Guides.*
- 6 Reed — *Flower Guides.*
- 4 Ritchie — *Primer of Hygiene.*
- 6 Rocheleau — *Great American Industries.*
- 4 Schwartz — *Wilderness Babies.*
- 6 Seton — *Wild Animals I Have Known.*
- 6 Stickney — *Pets and Companions.*
- 6 Turner — *Our Common Friends and Foes.*
- 2 Warner — *Hunting a Deer.*
- 6 Woods — *Farm Friends and Foes.*
- 6 Woods — *Our Wild Animals and How They Help Us.*
- 6 Williams — *Wonders of the Modern Railway.*

3. Construction Books

- 2 Adams — *Electrical Experiments.*
- 1 Adams — *Machinery Book for Boys.*
- 1 Baker — *Boys' Book of Inventions.*
- 2 Beard — *How to Make Things* (Kites, etc.).
- 3 Balderston — *The Laundry.*
- 6 Blackburn — *Problems in Farm Woodwork.*
- 4 Burkett and Swartzel — *How to Mend Shoes.*
- 3 Butterick — *Embroidery Up-to-date.*
- 3 Butterick — *The Sewing Book.*
- 1 Cochrane — *The Wonders of Modern Mechanism.*
- 1 Collings — *Boys Book of Model Aeroplanes.*
- 3 Foster — *Cooking for Girls.*
- 3 Gulick — *First Aid and Equipment.*
- 1 Howden — *The Boys' Book of Steamships.*

- 1 Jenks — *Electricity for Young People.*
- 2 Kinne and Cooley — *Food and Household Management.*
- 4 Kinne and Cooley — *Shelter and Clothing.*
- 1 St. John — *How Two Boys Made Their Own Electrical Apparatus.*
- 4 Smith — *The Home Aquarium and How to Care for It.*
- 6 Wolman — *A Course in Sewing.*

4. Play Books

- 4 Bates and Orr — *Pageants and Pageantry.*
- 4 Burchenal — *Folk Dances and Games.*
- 6 Chubb — *Festivals and Plays.*
- 6 Crampton — *The Folk Dance Book.*
- 4 Crawford — *Folk Dances and Games.*
- 4 Curtis — *Education through Play.*
- 4 Fry — *Educational Dramatics.*
- 6 Harrington and Farwell — *Nursery Rhyme Dances.*
- 4 Hofer — *Popular Folk Dances and Games.*
- 4 Johnson — *Education by Plays and Games.*
- 4 Johnson — *What to Do at Recess.*
- 6 Mornington — *Festival Plays.*
- 3 Needham — *Folk Festivals.*
- 6 Newton — *Graded Games and Rhythmic Exercises.*
- 6 Reed — *Wholesome Card Games.*
- 6 Spalding — *How to Play Baseball.*
- 6 Spalding — *How to Play Basket Ball.*
- 6 Spalding — *How to Play Croquet.*
- 6 Spalding — *How to Play Football.*
- 6 Spalding — *How to Play Golf.*
- 6 Spalding — *How to Play Indoor Baseball.*
- 6 Spalding — *How to Play Tennis.*
- 6 Spalding — *How to Play Volley Ball.*

5. Miscellaneous Books

- 1 *The Book of Knowledge.* (The Children's Encyclopedia.)
- 3 Bourne and Benton — *History of the United States.*
- 3 Burkett and Swartzel — *Farm Arithmetic.*

- 3 Mace — *A School History of the United States*.
12 Webster — *Common School Dictionary*.

6. Farmers' Bulletins

- 6 Propagation of Plants (*No. 157*).
6 Pruning (*181*).
8 School Garden (*218*).
8 Home Vegetable Garden (*255*).
4 Beans (*289*).
6 Cowpeas (*318*).
4 Sweet Potatoes (*324*).
8 A Successful Poultry and Dairy Farm (*355*).
8 Use of Milk on the Farm (*363*).
8 Care of Food in the Home (*375*).
8 Corn Cultivation (*414*).
8 Seed Corn (*415*).
4 The Peanut (*431*).
8 Hog Houses (*438*).
6 Spraying Peaches for Control of Brown Rot and Scab (*440*).
8 Bees (*447*).
6 Red Clover (*455*).
8 Grape Propagation, Pruning and Training (*471*).
6 Use of Paint on the Farm (*474*).
8 Benefits of Improved Roads (*505*).
6 Smuts of Wheat, Oats, and Corn (*507*).
6 Important Poultry Diseases (*530*).
8 Good Seed Potatoes and How to Produce Them (*533*).
8 How to Grow an Acre of Corn (*537*).
6 Potato Tuber Diseases (*544*).
6 Pop Corn for the Home (*553*).
6 Use of Corn, Kafir, and Cowpeas in the Home (*559*).
6 Corn Meal as a Food: Ways of Using It (*565*).
8 Poultry House Construction (*574*).
8 Breeds of Sheep on the Farm (*576*).
8 Handling and Feeding of Silage (*578*).
6 Common Mole (*583*).
8 Natural and Artificial Incubation of Eggs (*585*).
6 Road Drag and How to Use It (*597*).

310 AN EXPERIMENT WITH A PROJECT CURRICULUM

- 8 Clean Milk: Production and Handling (602).
- 8 Farm Kitchen as a Workshop (707).
- 6 Bird Houses and How to Build Them (609).
- 6 Breeds of Beef Cattle (612).
- 6 Breeds of Draft Horses (619).
- 6 Natural and Artificial Brooding of Chickens (624).
- 8 Common Birds Useful to the Farmer (630).
- 8 What a Farm Contributes Directly to the Farmer's Living (635).
- 6 Eradication of the Cattle Tick (639).
- 8 Hessian Fly (640).
- 4 San Jose Scale and Its Control (650).
- 6 Honey and Its Use in the Home (653).
- 8 Community Egg Circle (351).
- 8 Chinch Bug (119).
- 8 Weeds: How to Control Them (660).
- 6 Apple Tree Tent Caterpillar (662).
- 8 Simple Trap Nest for Poultry (682).
- 4 Use of Sorghum Grain (686).
- 8 Plan for a Small Dairy House (689).
- 6 Duck Raising (697).
- 8 Suggestions for Parcel Post Marketing (703).
- 8 School Lunches (712).
- 6 Sweet Potato Diseases (714).
- 8 Food for Young Children (717).
- 8 Fly Traps and Their Operation (734).
- 8 The Feeding of Dairy Cows (743).
- 6 A Simple Steam Sterilizer for Farm Dairy Utensils (748).
- 8 Roses for the Home (750).
- 8 Breeds of Swine (765).
- 6 Homemade Fireless Cookers and Their Use (771).
- 6 How to Select a Sound Horse (779).
- 6 The Sheep Tick and Its Eradication by Dipping (798).
- 8 Mites and Lice on Poultry (801).
- 8 Standard Varieties of Chickens (806).
- 8 Bread and Bread Making (807).
- 8 How to Select Foods: What the Body Needs (808).
- 6 Equipment of Farm Sheep Raising (810).
- 6 Minor Articles of Farm Equipment (816).

- 8 How to Select Foods; Cereal Foods (817).
- 8 Watermelon Diseases (821).
- 6 Live Stock Classification at County Fairs (822).
- 8 How to Select Foods: Foods Rich in Protein (824).
- 8 Marketing Eggs by Parcel Post (830).
- 8 Hog Cholera (834).
- 6 Sweet Clover: Harvesting (836).
- 8 Home Canning by the Cold-pack Method (839).
- 6 Farm Sheep Raising for Beginners (840).
- 8 Home and Community Drying of Fruits and Vegetables (841).
- 8 Potato Storage and Storage Houses (847).
- 8 How to Make Cottage Cheese on the Farm (850).
- 8 The House Fly (851).
- 6 Home Canning of Fruits and Vegetables (853).
- 8 Homemade Silos (855).
- 8 Control of Diseases of Vegetable Garden (856).
- 8 Removal of Stains from Clothing (861).
- 4 Increasing Potato Crop by Spraying (868).
- 8 The Community Fair (870).
- 5 Swine Management (874).
- 8 Making Butter on the Farm (876).
- 8 Home Storage of Vegetables (879).
- 8 Saving Vegetable Seeds for Home Garden (884).
- 4 Harvesting Soy Beans for Seed (886).
- 8 Breeds of Dairy Cattle (893).
- 8 Rats and Mice (896).
- 9 Homemade Fruit Butters (900).
- 8 Everbearing Strawberries (901).
- 3 Prevention of Fire and Fire Fighting on the Farm (904).
- 8 The Self-Feeder for Hogs (906).
- 8 Killing Hogs and Curing Beef (913).
- 8 Home and Community Conveniences (934).
- 6 Cabbage Diseases (937).
- 6 Making Light Bread (Missouri University Bulletin).
- 8 The Farm Kitchen (M. U. B.).
- 8 Exhibits and Contests for Boys' and Girls' Clubs (M. U. B.).
- 8 Farm Buildings for Missouri (M. U. B.).
- 8 Homemaking in Missouri (M. U. B.).

7. Papers and Magazines

- | | |
|---|-----------------------------|
| 1 <i>Joplin Daily and Sunday Globe.</i> | 1 <i>American Boy.</i> |
| 1 <i>Pineville Democrat</i> (county). | 1 <i>Popular Mechanics.</i> |
| 1 <i>Little Folks.</i> | 1 <i>Country Gentleman.</i> |
| 1 <i>Saint Nicholas.</i> | 1 <i>Youth's Companion.</i> |
| 1 <i>Literary Digest.</i> | |

8. Pictures

Stereograph

- | | |
|--|-----------------------------------|
| 1 Our Big Trees. | 1 Electricity in the Making. |
| 1 Christmas in Other Lands. | 1 Important Places at Washington. |
| 1 Our Animal Helpers. | 1 The Packing Industry. |
| 1 Homes of Children in Other Lands. | 1 Coal Mining. |
| 1 How People Travel in Other Lands. | 1 The Sugar Industry. |
| 1 Wild Animals of Other Lands. | 1 The Lumber Industry. |
| 1 Life in Cold Lands. | 1 Our Big Railroad Centers. |
| 1 Life in Hot Lands. | 1 Our Woolen Mills. |
| 1 Our Life in the Highlands. | 1 Our National Parks. |
| 1 Schools of Other Lands. | 1 Our Big Orchards. |
| 1 Our Big Ships. | 1 Making Flour. |
| 1 Government Activities at Washington. | 1 Uncle Sam's Mail. |
| 1 Caring for Sick People. | 1 Our Poets. |
| 1 The Shirt Industry. | 1 The Lumber Industry. |
| 1 Our Big Newspaper Plant. | 1 The Western Ranch. |
| | 1 Tractor Farming. |
| | 1 The Story of Bread. |

*Lantern Slides*¹

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|---------------------|---------------------------|
| 1 Our Wild Animals. | 1 Our Penal Institutions. |
| 1 Our Yard Flowers. | 1 The Cotton Industry. |
| 1 Our Wild Flowers. | 1 The Fly. |
| 1 Our Poultry. | 1 Our Animal Helpers. |
| 1 Our Pets. | 1 Our Corn. |

¹ Borrowed from the Extension Division of the University of Missouri and the Educational Department of the International Harvester Company.

1 Gardening.	1 Spraying Our Orchards.
1 Making Wheat Flour.	1 Our Pigs.
1 Our Dairy Cows.	1 Growing Alfalfa.
1 Making Roads.	1 Our Schools.

III. PLAYGROUND EQUIPMENT

The Experimental School had a five-acre plot for the playground and experimental garden. The playground was equipped with the following:

- 1 tether ball court and equipment.
- 1 volley ball court and equipment.
- 1 baseball court and equipment.
- 1 basket ball court and equipment.
- 1 tennis court and equipment.
- 1 croquet court and equipment.
- 2 Giant Strides.¹
- 2 see-saws.¹
- 1 chute.¹
- 1 parallel bars.¹
- 6 swings.¹

¹ Made by pupils of the school.

CHAPTER VII

CURRICULUM PRINCIPLES

- I. FUNCTION OF THE SCHOOL
- II. SELECTION OF THE CURRICULUM
- III. ORGANIZATION OF THE CURRICULUM

CHAPTER VII. CURRICULUM PRINCIPLES

I. FUNCTION OF THE SCHOOL

THE SCHOOL SHOULD FURTHER THE CONTINUOUS GROWING OF BOYS AND GIRLS

ON all sides of us "we hear life murmur or see it glisten." These observable expressions appear to be vital tendencies working ahead in innumerable processes, each continuous with a similar one in the past. The whole movement seems to be a kind of continuous growth in the sense that each tendency appears from all objective evidence to be bent upon a *continuous experiencing in processes*, rather than upon achieving some fixed and distant end.¹ Thus any particular phase of the movement may be considered as a series of experiences, each continually "leading on" to a succeeding one.

This onward movement of life about us is, in a measure, exemplified in Professor Cooley's illustration of the growth of the wild grape vine.² I myself have often observed it pushing ahead in the face of seemingly unsurmountable barriers on my father's farm. Unexpectedly, during the showery, sunny spring days the vine's seed which had been previously deposited by chance in the fertile soil of the ravine would send forth "straight, rapidly growing shoots with two branched tendrils at the end. These tendrils revolve slowly through the air, and when one touches an obstacle, as a wire or branch, it hooks itself about it and draws up in the form of a spiral spring, pulling the shoot up after it. A shoot which thus gets a hold grows rapidly and sends out more

¹ Kilpatrick, W. H., "Education Its Own End," a syllabus in the *Philosophy of Education*, p. 54.

² Cooley, C. H., *The Social Process*, p. 8. Used by permission of Scribner's.

tendrils" to repeat again the "experience," if we may so name it, *ad infinitum* until it has extended itself above the surrounding shrubbery and into the highest neighboring tree. The vine thus continues to grow through the outcomes of one "experience," ever "leading on" to a succeeding one.

Study of any one of those "experiences" reveals two forces at work. There is, on the one hand, a system of tendencies which the vine has inherited from its ancestry. Among the more fundamental ones there is the vital tendency itself. Then there is the tendency to send out shoots with two branched tendrils at the end. Probably the most marked of all are the tendencies of the tendrils to revolve slowly through the air, to bend themselves about any object with which they meet, and then to draw up like spiral springs. Other tendencies might be pointed out, such as, for instance, the disposition to grow more rapidly where the light is greatest, or at the highest point attained, and so on. But these more fundamental ones suffice to point out the fact that the vine is equipped with a repertory of available tendencies which insure its growth in certain environmental situations.

On the other hand, it is equally apparent that growth takes place only as these tendencies interact with objects and conditions of an environmental situation. For instance, the warm fertile soil of the ravine sets into action the tendency to send out straight, rapidly growing shoots with two branched tendrils at the end. The air medium assists the tendency of the tendrils to revolve about in the search of some branch. This near-by branch discovered touches off the tendency to bend about it and to draw up in the form of a spiral spring and consequently to pull the shoot up after it. The shoot thus attached to the branch sets off again the tendency to grow rapidly and to send forth more tendrils to repeat the process. Indeed, to explain fully the part that the environmental situation plays in the growth of the vine it would be necessary to take into account other forces, such as, for instance, the help or hindrance of neighboring vines, plants, etc., but these more noticeable ones serve to point out the significance of the

environmental factor in the growth of the vine. The vine thus examined in process of growing reveals two essential forces: (1) inborn tendencies, and (2) environmental stimuli. And growth at any particular stage is the outcome of these coördinate forces interacting with each other.

Human growth is essentially the same — the factors are the same. The child, like the vine, receives from its ancestry a system of inborn tendencies which insure its growth under certain conditions. Among the more basic ones¹ there is, for example, the seemingly inexhaustible physical tendency. It manifests itself most noticeably in the innumerable running, jumping, climbing, and throwing games of children. Then there is the ever persistent manipulative tendency — the tendency of children to make something of immediate concern, possibly a doll dress, a sled, a wagon, or a rabbit trap. Another marked tendency is vocalization. It expresses itself most obviously in various forms of children's conversation, personal intercourse, and communication. Probably, the most pronounced of all is the deep-lying and powerful exploratory tendency. This is constantly manifested by the watchfulness of children of everything that goes on about them, especially the actions of things and people.

Thus equipped, the child comes into a strange world, a world veritably teeming with life. There is nature on the one hand in all her varied forms — the glories of the field, the flowers, the trees, and the marvels of the starry heavens; the songs of the birds, the joyous notes of insects, the sighing of the wind in the treetops, and the rippling of the spring brooklet; and the rock and soils of the earth with wonderful forces at work in it. On the other hand, there are the manifold activities of people — the home with its occupations of cooking and sewing and gardening; the farm with its fields of corn and wheat and barley, its barnyard of lowing cows, bleating sheep, and cackling hens; the store with its exchange of manufactured products; the shop with its tools and machines; the playground with its games of ball

¹ Thorndike, E. L., *Educational Psychology*, vol. I, chapter X.

and other tests of skill; and multitudinous other human activities.

The child's active tendencies induce him to experiment with this world of things around him, and as a result of this active experimentation the tendencies themselves undergo change — they *grow*. He discovers, so to say, through this “trying on,” both what he can do with these things and what he cannot do, since through neural bonds the result of such experiences become embodied in his own nature. For instance, observing other children playing Roly Poly suggests to the child a purpose in which his play tendency may find fulfillment. The neural bonds pertinent to his play tendency are in “readiness” to be tested in action at practically all times during his wakeful hours, and because of the “readiness” of those bonds for play activity, the child readily purposes to engage in the Roly Poly game with the other children, in spite of the fact that he knows nothing about the technique of the game. He immediately plunges wholesouledly into the new game and begins active experimentation with the balls, bowling at the Roly Polys, arranging the Roly Polys on the triangle, keeping his score, etc. His purpose as his chief guide, however, defines his action in each instance — tells him his success from his failures — and directs him in his observation, selecting, and testing of movements that enable him eventually to participate successfully with his other friends in the game.

The child undergoes two sorts of simultaneous changes as a result of his Roly Poly experience: (1) primary changes and (2) concomitant changes. The first set of changes had to do with specific neural bonds (habits) connected with learning the particular technique of the game — habits in holding the balls, bowling at the Roly Polys, arranging the Roly Polys on the triangle, keeping his score, etc. Such “primary outcomes” are cumulative and conserve for the child a specific technique for subsequent similar activities. The second set of changes had to do with a somewhat different sort of neural bonds (attitudes) and were involved in the “trying on” phase of the game, such as, for example, attitudes

toward experimenting with new things, toward variation and invention of new movements in the game, toward the teacher and other pupils as genuine co-partners, toward the game as a satisfying activity, toward the school as a place for doing real things, toward the belief that it pays to try and to put forth effort, etc. Since these "concomitant outcomes" are projective, they lead the child on to further experimenting in the Roly Poly game or in other games and consequently to more "primary outcomes." It is in this fashion that the child continues to grow through a continuous building of habits, attitudes, etc. As the vine pulls itself up to higher levels by means of new tendrils, so does the child attain higher levels by means of new bonds. This process continues indefinitely in both instances, unless the insufficiency of the environment fails to produce in the first instance new tendrils or in the latter new bonds.

Since the elementary school is an institution established by society for the education of children, it would seem in light of the foregoing that its most consistent function would be to provide an environment that furthers the continuous growing of its pupils — an environment that affords them *practice* in the selection and successful realization of purposes.¹ In this sense, life is life if education is going on, for education itself is a continuous realization of chosen purposes.

II. SELECTION OF THE CURRICULUM

THE TEACHER SHOULD GUIDE BOYS AND GIRLS IN SELECTION OF PURPOSES IN REAL LIFE

The function of the teacher in guiding boys and girls in selection of purposes is to provide a school environment suggestive of numerous and varied child purposes, and to allow the child *freedom* under her guidance to select wisely these purposes.

¹ Kilpatrick, W. H., "The Project Method," *Teachers College Bulletin*, Number 3.

1. The School Environment

1. Guidance of boys and girls includes a school environment suggestive of numerous and varied purposes. The school environment probably most conducive to child purposes is similar to that of the better home.¹ Here social conversation functions *par excellence*. Out of it arise certain points that vitally concern the child and, as such, afford him an opportunity to contribute his experiences relative to the issues. It also provides the child with a ready forum wherein to submit his inquiries regarding the things that he has observed about him. In this way his misconceptions are corrected and his present experiences are extended. In addition to social conversation, the home provides various occupations in which the child gets useful habits of industry, regard for the rights of others, and useful skills and knowledges. Again, games, stories, sports, music, occupy prominent places in the leisure of the home. Consequently, the child not only enjoys real fun as a child, but comes to know, in addition, the things that contribute genuine fun. Furthermore, the home provides a workshop equipped for construction and experimentation — a place for the child to give concrete expression to his ideas and to carry forward experimentally inquiries relative to the various things surrounding him. Then, too, the environment of the home extends to the fields, forests, garden, and community occupations. The freedom thus accorded the child in observing natural phenomena and occupations about him opens up, in a word, the larger world outside of the home. He thus comes to understand and appreciate the veritable forces surrounding him and his relation to them.

The outstanding feature, then, of the home environment, the natural abode of the child, is that it provides richly for social converse, observation of natural phenomena, and participation in various occupations and leisure activities. *As such it engages*

¹ Dewey, John, *School and Society*, chapter I.

Meriam, J. L., *Child Life and the Curriculum*, chapters VIII and IX.

all of the basic tendencies — play, exploratory, communicative, and manipulative — of boys and girls. Following this lead, the first function of the teacher is to afford her pupils opportunity to continue their active participation in the real world about them — a world of games, sports, stories, natural phenomena, social converse, and occupations.

2. Freedom in Selecting Purposes

1. Guidance of boys and girls includes providing freedom in selecting purposes. Since boys and girls pursue both individual and group purposes, selection is accordingly by individuals and by groups. The method of selection, however, differs only in the number that participates in such. For instance, in the former, it is a coöperative matter between the individual pupil and the teacher, while in the latter it involves a group of individuals, among whom the teacher is one. In group selection, each member, including the teacher, should freely suggest any purpose that he or she would like to have the group pursue. As the purposes are thus suggested, one member should record them on the blackboard, preferably an easel blackboard adapted to the circular form of conference. After the purposes have thus been suggested and recorded, the members of the group, teacher included, should discuss each in an informal manner, pointing out in this connection what they may get out of the proposed purposes, means available, and possibility of pursuing them. When the suggested purposes have been thoroughly scrutinized by the pupils and teacher in this manner, the group should select one from the proposed list for group participation, a majority of the pupils controlling selection. Other purposes suggested and considered feasible in connection with the final selection should be recorded on the Project Bulletin Board.¹ Then, too, as purposes are from time to time suggested, pupils, individually or collectively, should record them on this board as candidates for future consideration.

¹ A special blackboard six by ten feet prepared for this purpose.

Initiating purposes in this manner makes it possible and practicable, therefore, to allow boys and girls freedom under the guidance of the teacher to choose purposes that promise to further their own growth and, also, to have a variety of such purposes on the waiting list. The Project Bulletin Board thus becomes a veritable record of the "animating purposes" of boys and girls, which furnish the magnetic force of the school.

3. Criteria for Selecting Purposes

1. Guidance of boys and girls necessitates clearly recognized criteria for selecting purposes. Child purposes range from the relatively momentary, illustrated by the desire to make a sand pile, to the enduring forces of life, like *amour propre* and *esprit de corps*. The growth of the child, as has been pointed out (pp. 319-321), depends upon a realization of the enduring type of purposes. It is, therefore, necessary to choose, in the words of Professor Dewey, between purposes that are trivial and those that are fruitful; between those that are mischievous and those that are useful; between those that are transitory and those that are permanent.¹ Guidance of the child in selecting purposes thus necessitates clearly recognized criteria on the part of the teacher. The criteria here propose that guidance proceed on the bases of the (1) practicability, and (2) "leading on" quality of purposes.

2. Practicability. The first criterion of growth involves selection of purposes on a basis of possible realization on the part of the child. In the first place, this criterion limits selection to purposes clearly conceived by the child and capable of guiding him in the processes of planning, executing, and judging. For instance, suppose Christene purposes to make an apron for her doll. If she heartily purposes to make the apron, if she plans it, and if she successfully makes it herself, the purpose would seem to be highly practicable and conducive to growth.

On the other hand, suppose Jim purposes to make a library

¹ Dewey, John, *School and Society*, chapter VI.

table. If he had been persuaded more or less in making his choice, if the teacher did a major part of the planning because of his inability to comprehend the processes involved, or if he blindly followed the directions of some manual in its construction, the purpose in this instance is, without question, impracticable and probably incapable of furthering growth. Its fundamental weakness, in this instance, lies in the fact that it is incapable of translation into executable means pertinent in its own realization, since it fails properly to connect with, engage, and utilize Jim's present stock of knowledge, habits, and tendencies. A purpose, engaged in under such conditions, is a distant end, and as such it becomes a mere end, that is a dream, a fancy, a wish incapable, in most instances, of suggesting, defining the end of, and guiding in immediate activity. It belongs in another world in so far as Jim is concerned.

Stated positively, a purpose should be capable of working back into a *series of executable means* — activities — upon the *child level*. It should, in addition, be the *directing* agency in the process of such translation, since the child is the one that is expected to observe, select, organize, and test out possible means relevant in a particular situation. The very growth of the child himself depends upon his ability to translate a foreseen end into pertinent means and to execute effectively these means. Stated more specifically, the purpose should, in every instance, be capable of suggesting, defining the end of, and guiding in the process of executing means pertinent in its own realization. As such it becomes a series of concrete and practical activities directed toward some foreseen end of the child. Christene's purpose to make her doll a white linen apron, trimmed in pink ribbon, with shoulder straps and waist strings, is an instance. In the first place it did, in point of fact, suggest to her means relevant in its realization, that is, materials (cloth, ribbon, sewing thread, and buttons), tools (scissors, thimble, measuring tape, needle, and laundry irons), and processes (designing, measuring, cutting, sewing, and pressing). In the second place, it guided her in the execution of

these suggested means — choosing the kind and amount of cloth, ribbon, sewing thread, and buttons; securing the scissors, thimble, measuring tape, needle, and laundry irons; cutting the pattern, assembling the various parts of the apron, sewing and stitching, pressing the seams, etc. Only as a purpose is thus converted into a series of executable means is it definitely conceived and realizable by the child. Just as a mere purpose, it is a fancy, a dream, a wish. Practically any purpose, to be sure, is a wish in its initial stage; but the point is, it remains a wish only in connection with means, and means are executable only when they engage the present stock of child knowledge, habits, and tendencies. Capability of translation into a series of executable means upon the child level is therefore the first test of acceptability of proffered purposes proposed by the criterion of practicability.

The criterion of practicability also proposes that purposes be selected with reference to available resources. For Christene to purpose to make her doll an apron without considering the possibility and probability of securing the necessary materials and tools in its construction would, in many instances, result disastrously, since it might be impossible for her to secure some of the needed materials or tools. The local merchant, for example, might be out of pink ribbon, or she might be unable to secure the necessary funds in purchasing the materials, etc., etc. In short, the criterion of practicability proposes that the teacher guide boys and girls in the selection of only those purposes that lend themselves to *successful* realization in the sense that they are capable of translating into a series of executable means upon the child level, and are practicable from the point of view of available resources.

3. Activity leading to further activity. The second criterion of growth, *activity leading to further activity*, proposes to evaluate the fruitfulness of child purposes on the basis, first, of continuous action, and second, of branching action.¹

¹ Kilpatrick, W. H., "Activity Leading to Further Activity," a syllabus in the *Philosophy of Education*, page 15.

Continuous series of activity. First, as to continuous action, this criterion involves selection of purposes which inherently possess the possibility and probability of a *continuous series of activity*. An instance of such a purpose is Christene's purpose to make her doll an apron. This apron project did, in point of fact, suggest to her the purpose to make her doll a cap, the cap project suggested the purpose to make a pair of doll stockings, the stocking project suggested the purpose to make a doll rug, the rug project suggested the purpose to make a chest for her doll clothing, the chest project suggested the purpose to make her doll a new dress, the dress project suggested the purpose to make herself a school apron, the school apron project suggested the purpose to study the different kinds of materials and styles for making school aprons, the study of different kinds of materials suggested the purpose to study the sources of these materials. Similarly, the school apron project inherently possesses the possibility and probability of suggesting to Christene still other purposes as she grows older, such as, for example, purposes to make herself a school dress, to make clothing for her brothers or sisters, a study of the different kinds of materials and styles of clothing, a study of the manufacture of clothing materials, etc. Thus it is seen how the outcomes of one of Christene's purposes suggest and prepare for succeeding ones. So much for the continuous action.

Continuous branching activity. Second, as to branching action, the criterion of *activity leading to further activity* further proposes to limit selection to purposes that inherently possess the possibility and probability of suggesting other and different lines of purposes in the process of realization. Christene's original purpose to make her doll an apron is also an instance of such a branching purpose. In the process of its realization it did lead to other and different lines of purposes, such as, for example, purposes to make doll rugs, doll furniture, doll dishes, study of different kinds of materials and styles for making school aprons, study of the sources of these materials, etc. These suggested purposes are obviously different lines of activity, since each involves a different

kind of material and process in its realization. Making the doll apron involved sewing material and processes; making the doll rug, weaving material and processes; making the doll furniture, woodworking material and processes; making the doll dishes, pottery material and processes, etc. In short, Christene's original purpose intrinsically possessed the possibility of *continuous branching activity*.

The difference between a merely continuous purpose and a branching purpose will perhaps be made clearer in a simple experiment in making metal polish worked out by the Third Group of the Experimental School. One day in discussing how to care for the cooking equipment, one of the girls suggested that the knives, forks, and spoons needed polishing very badly. Two or three of the other girls then told how they had polished knives and forks at home. After discussing the matter, the group finally decided that they should polish the knives and forks of the school. At this point one of the girls inquired where they could get some metal polish. One of the boys stated that none could be secured at the local store, as he had tried to get some for his mother a few days ago. They were just about ready to abandon their purpose, when the teacher suggested that they might be able to make some metal polish by precipitating the calcium carbonate out of Mr. Murphy's well water, the presence of which they had previously discovered. The pupils were all eager to try the experiment. With simple apparatus — a quart fruit jar, a glass tube secured from the agricultural equipment, and lime water from Mr. Murphy's well — they proceeded to precipitate the calcium carbonate out of the water. The experiment was successful. They made enough precipitated chalk to polish the knives, forks, and spoons of the school. Shortly after finishing the project, the pupils met to discuss their experiment. In this connection one of the boys suggested that he would like to know how the rocks had been formed at the bottom of his father's well. This led to a study of the processes by which sedimentary, igneous, and other rocks had been formed; then to the uses of the different kinds of

rocks; the effects of these rocks upon the occupations of people — farming, quarrying, stone cutting, transportation, etc. Thus it is seen how a rather simple purpose leads boys and girls on to varied lines of activity because it possesses at the outset the possibility of continuous branching action.

All this is, as a rule, exactly not true with such a purpose, if we may call it a purpose, as playing an arithmetic game, for example, a number combination game. Such a purpose is typical of many purposes engaged in by school children that lead to one straight line of activity, namely, more drill in number combinations. It is, in other words, inherently incapable of suggesting to and preparing boys and girls for *other and different* lines of purposes in the process of its realization. Being a mere repetition of the same act, the game tends to become in time stale and flat — hence the demand for school prizes — and boys and girls will no longer engage in it unless they are forced to do so. Its fatal weakness lies in the fact that it lacks the continuous branching quality observed in the metal polish experiment or in Christene's purpose to make her doll an apron. The second criterion of growth, therefore, proposes that the teacher guide her pupils in the selection of those purposes that inherently possess the "leading on" quality, for the very growth of the child himself depends upon the outcomes of one purpose ever suggesting and preparing for succeeding ones.

4. Summary of criteria. Briefly stated, the criteria proposed for the use of the teacher in guiding pupils in the selection of purposes are:

1. Does the proposed purpose *genuinely grip* boys and girls?
2. Does the proposed purpose lend itself to *successful* realization on the part of boys and girls?
3. Does the proposed purpose prospectively lead to *other and different* lines of purposes in the process of its realization?

Any purpose which possesses the qualities proposed by these criteria is conducive to child growth. The criteria admit of two possible ways for initiating such a purpose. In the first place,

the pupil or pupils may suggest a purpose and the teacher may approve the suggestion on the basis of the proposed criteria; in the second place, the teacher may propose a purpose in light of the proposed criteria and the pupil or pupils may accept the suggestive purpose. In either instance, the teacher is the sole judge of the final interpretation of the fruitfulness of proffered purposes on the basis of the proposed criteria.

III. ORGANIZATION OF THE CURRICULUM

THE TEACHER SHOULD GUIDE BOYS AND GIRLS IN SUCCESSFUL REALIZATION OF PURPOSES IN REAL LIFE

The purpose having been selected, the teacher's function is to guide the pupils (1) in working out plans for attaining it, (2) in executing the plans, and (3) in criticising the finished product. Here, as in case of selecting purposes, the teacher should, by all means, allow pupils freedom in observing, selecting, arranging, and testing means with reference to the purpose set up. Intervention, on her part, should come only at those points where the pupils have exhausted every means possible at their command. That is to say, *planning, executing, and criticising should come from the pupils and not from some nicely drawn up procedure of the teacher.* The fundamental of guidance, here, is (1) supplying sources of reference, materials, tools, apparatus, etc., needed in pursuing the purpose; (2) suggesting indirectly by questioning, ways of overcoming seemingly insurmountable difficulties that arise in connection with planning, executing, and criticising; and (3) approving or disapproving phases of the work in the process of realizing the purpose. If the purpose is an individual affair, responsibility for successful observing, selecting, arranging, and testing means, should rest primarily upon the individual pupil, and only secondarily with the teacher; with group purposes, the group, including the teacher, is the responsive agent. Pupil activity is the key to successful learning in either instance.

1. Planning the Project

In working out plans for any particular purpose, the pupils, either individually or collectively, should make use of all available sources of information, such as, for instance, a study of suggested plans in reference books; interviewing competent people of the community; study of tools, apparatus, materials, and processes involved in the project's execution; observing various models and natural phenomena in the community; and communicating (usually by letter) with experts relative to suggestions. Out of these preliminary observations, investigations, and discussions, the pupils should work out a tentative plan, incorporating such suggestions as they consider feasible. As such, the plan provides for continual revision always necessitated as a result of some phase arising in its execution that has been either overlooked or inadequately provided for in its original construction. The plan thus worked should be recorded in the Project Folder of each pupil to serve as a guide in carrying forward the execution of the selected purpose.

As purposes differ greatly in kind, no one formal way of planning may be followed by the pupils. Planning a story differs greatly from planning a rabbit trap. In the former, planning is a matter of pupils discovering the picture portrayed in the story; and observing, selecting, and testing means for expressing the picture to others. In the latter, planning involves a study of suggested plans for making rabbit traps in books; tools, materials, and manual processes. Similarly, planning a game or dramatization differs from planning an excursion. Notwithstanding this, some form of planning is antecedent to effective realization of any type of purpose. *The important point is that the plan should fit the project, and not vice-versa.*

2. Executing the Plan

Execution of plans may involve the whole school, one of its groups, or individual pupils, depending upon the nature of the

purpose — whether the purpose is an individual or group affair. Then, too, in case of a group purpose, it may involve committee work; that is, if the purpose, for instance, involves the school as a whole, the pupils may be divided into committees, each assuming some definite portion of the plan to execute and report results to the school as a whole. Typical instances of such projects are the community fair, community play day, holiday festival, beautifying the school grounds, etc. Similarly, individual, group, school, grade, or combination of grades projects often necessitate committee procedure, such as, for example, investigation of community problems, social parties, story dramatization, etc. In any procedure, whether individual, school, group, or committee, pupils should be responsible for effective execution of the plan in its entirety, and should be accountable to the group for any neglect or inefficiency.

The form of execution varies, too, in that it may involve one or all of the following modes of action: (1) constructing, (2) observing, (3) investigating, (4) playing, (5) experimenting, (6) communicating, and (7) artistic expressing. In common with planning, form of execution depends wholly upon the nature of the purpose, and, for this reason, no one mode of action may be arbitrarily assigned exclusively to any one type of purpose, such as, for example, projects in drawing, playing, reading, problem solving, etc. It is obvious that effective participation in any one of the above illustrations might involve, in addition to the assigned mode of action, observation, experimentation, construction, etc. It is often advisable, however, to label projects in accordance with their more dominant characteristic mode of action, such as, for example, play projects, story projects, excursion projects, and hand projects,¹ provided that the other forms of expression freely function in their execution. Such a classification assists the

¹ Kilpatrick, W. H., *The Project Method*, p. 16 (types of projects).

Meriam, J. L., *Child Life and the Curriculum*, pp. 277-382 (types of child activity).

Dewey, John, *School and Society*, chapter II (types of child interest).

teacher in knowing the kind of projects in which boys and girls normally engage and the procedure that normally prevails in pursuing each type. It also facilitates practical administration of schoolroom work around types of activity that enable all the children to work together effectively at the same time, such as, for instance, outdoor study (excursion projects), noisy work (hand projects), comparatively quiet activity (story projects), and group activity (play projects).

Form of execution possesses, however, one common characteristic indispensable to the effective realization of all types of projects, namely, active expression. It is the one inexhaustible means that boys and girls possess for the realization of their purposes. For this reason, they should be allowed freedom to actively participate in the execution of all types of projects. After the plans have been executed in this manner, the results of the work should be recorded by each pupil in his Project Folder for future reference.

3. Criticising the Product

After the pupils, either individually or collectively, have finished the execution of the plans for any particular project, opportunity should be afforded them to freely criticise the finished product. The teacher, in this connection, should guide such criticism along (1) specific and (2) general lines. That is to say, in specific criticism pupils should discover whether they have succeeded or failed in effective realization of their specific purpose and wherein and why; in general criticism the pupils should discover the more general errors — shortcomings that occur more or less repeatedly in the realization of any one type or all types of projects, such as, for example, carelessness in formulating or in following plans, inaccuracy in workmanship, etc.

For instance, if Tommie's purpose is to make a rabbit trap that will entrap the bunny every time that he attempts to steal the bait, the specific test and consequently the specific criticism to be applied by Tommie to his finished product is to discover whether

it will do this — will it work? In case it fails, Tommie is curious to know why it will not — what are the specific causes, mistakes, and how he may overcome these difficulties. He thus directs himself to some neglect or inefficiency (specific criticism) on his part in formulating the rabbit trap plan or in executing the plan effectively. As a consequence of this, Tommie's attention is quite naturally directed to a more general criticism of his work, such as, for instance, his failure (1) to follow plans carefully, (2) to check finished phases of work with its plans, (3) to be exact in workmanship, etc. He naturally and effectively acquires in repeated instances of this kind, such generalizations as: "I should follow my plans carefully;" "I should check my plans with the finished product, or phases of the product, from time to time;" "I should see that each part works effectively before proceeding to other parts;" "I should be very exact in all of my workmanship;" etc.

Usually, the best procedure in guiding pupils in making both types of criticism is by means of the informal conference, in which each pupil, as well as the teacher, freely suggests what he or she considers the strong and weak features of the finished product. Such conferences may come at any time and may include individual pupils and teacher, or a group of pupils and the teacher, according to whether the project is an individual or group affair. In any case, the pupil or pupils should immediately proceed to effect the recommended changes — *should make the finished product tally with the purpose which it is to serve*. Changes thus effected should be indicated in the Project Folder of each pupil in connection with the record of the particular project, as such, oftentimes, serve useful purposes in succeeding projects. Then, too, the attention of the pupil or pupils should always be sharply directed to general errors — shortcomings — that occurred in the process of working out the project in connection with the same or similar errors — shortcomings — appearing in the realization of other purposes, for it is by such criticisms that pupils acquire the "concomitant outcomes" of life.

Obviously, it is not possible to separate the two kinds of criti-

cisms — specific and general — in practice, as they have been distinguished in idea. It would be absurd to devote one time to effecting specific criticisms and another to effecting general criticisms. As a matter of fact, both occur simultaneously and are most effectively learned in this relation. Tommie's attention, for instance, is most effectively directed to his general errors at the time that he notes his specific errors, and *vice versa*. It is, therefore, the peculiar function of the teacher to afford opportunity for these learnings to proceed *concurrently* and *coöperatively*, for it is impossible to build them effectively separately.¹ They go on simultaneously, well or ill, in every experienced situation of life.

Again, it should be observed that there is no set time or form for the teacher to follow in guiding boys and girls in criticising their work. The nature and the time of such criticism, in common with the other steps that normally prevail in realizing purposes, depend wholly upon the nature of the particular project engaged in by boys and girls.

¹ Kilpatrick, W. H., "The Wider Study of Method" in *Journal of Educational Method*, Vol. I, No. 2. pp. 15-19.

CHAPTER VIII

SUMMARY OF GENERAL FINDINGS

- I. PRACTICABILITY OF THE EXPERIMENT
- II. RETROSPECT AND PROSPECT

CHAPTER VIII. SUMMARY OF GENERAL FINDINGS

I. PRACTICABILITY OF THE EXPERIMENT

THE problem upon which this experiment is meant to contribute light was stated in Chapter I. It is restated here in the form of the following questions. Each question, or phase of the problem, is accompanied with the findings, contributed by the experiment, that seem to indicate a probable answer.

In addition to the primary variable of this experiment, the curriculum, the other variables pointed out in Chapter I undoubtedly influenced these findings in one way or another. In evaluating the findings stated severally below, these variables must be kept in mind with the probable amount of their combined effect, if any, and the school which it favored.

In making the following summary of findings, it is assumed that statements of their application are to be considered valid under conditions favorable to progress — competent teachers and supervisors, adequate equipment, and an attitude of parents either sympathetic or at least open-minded.

1. Can the curriculum be selected directly from the purposes of boys and girls in real life?

The foregoing data would seem unquestionably to indicate that the curriculum can be selected directly from the purposes of boys and girls in real life.

2. To what extent can the curriculum be selected directly from the purposes of boys and girls in real life?

The Experimental School outcomes and its general practicability in the other schools of the county seem to

justify the conclusion that the curriculum can be selected *entirely* from the purposes of boys and girls in real life.

3. What were the effects of this experiment where a curriculum was used selected directly from the purposes of boys and girls in real life?

1. The mean achievement of the Experimental School when expressed in terms of the achievement of the Control Schools and the achievement represented by the National Standards was in case of the former 138.1 per cent and in case of the latter 110.8 per cent.
2. The improvement of the children of the Experimental School at the end of the four-year period in eight ordinary attitudes toward the school and education ranged from 25.5 per cent to 93.1 per cent, whereas the improvement of the children of the Control Schools in the same attitudes ranged from 2 per cent to 15 per cent.¹
3. The improvement of the children of the Experimental School at the end of the four-year period in twelve ordinary phases of conduct in life outside of the school ranged from 35 per cent to 100 per cent, whereas the improvement of the children of the Control Schools in the same phases of conduct ranged from no improvement to 25 per cent.¹
4. The improvement of the parents of the Experimental School at the end of the four-year period in nine ordinary attitudes toward the school and education ranged from 16 per cent to 91.6 per cent, whereas the improvement of the parents of the Control Schools in the same attitudes ranged from no improvement to 30 per cent.¹
5. The improvement of the parents of the Experimental School at the end of the four-year period in fourteen ordinary phases of conduct in the home and community ranged from 20 per cent to 96 per cent, whereas the improvement of the

¹ The reader again is reminded that the measures here are crude and far from scientific reliability.

parents of the Control Schools in the same phases of conduct ranged from no improvement to 25 per cent.¹

6. The improvement in ten ordinary community conveniences of the Experimental School at the end of the four-year period ranged from 24.5 per cent to 94 per cent, whereas the improvement in the same conveniences for the Control Schools ranged from 3.3 per cent to 15 per cent.¹

4. Under what conditions is a curriculum selected directly from the purposes of boys and girls practicable?

The outcomes of the Experimental School and the judgment of one hundred and twenty teachers based upon four years of observation and experimentation with the Experimental School Curriculum seem to justify the conclusion that school work in terms of the purpose of boys and girls is practicable in any American rural school provided that the following minimum practical changes are made in the current country school:

1. That rural teachers undertake such study as will lead to an understanding and an appreciation of child life and the means of promoting child growth. This means a different and much better type of preparation for rural school teaching than now prevails in the normal schools of this country.
2. That the rural teacher have adequate assistance of a supervisor trained and experienced in project teaching.
3. That the teachers be supplied with a *suggestive* course of study — always suggestive, for project teaching never admits of a cut and dried course of study — containing a detailed account of a wide variety of projects as actually worked out by boys and girls.
4. That there be built onto the one-room rural school building an additional room and that one of the rooms be equipped for a reading room and the other one for a workshop.
5. That in the one-room rural schools with an enrollment of

¹ See footnote on previous page.

more than thirty pupils there be employed an assistant teacher.

6. That the money now spent for textbooks for individual pupils be used for the purchase of a school library selected with reference to the interests of boys and girls and that this library be used in working out the purposes of boys and girls.
7. That the money now spent for large globes, maps, charts, dictionaries, and encyclopedias be used for the purchase of apparatus for child experimentation, construction, and occupation.
8. That whenever the schoolrooms are reseated chairs and tables be used instead of the usual school desks.
9. That the school plant be used as a place for children to present to the various groups of the school and the parents the results of their experimentation, investigation, and construction as well as a place for community recreation.

II. RETROSPECT AND PROSPECT

These are the findings reached through this one study in this single situation. Because of the relatively small number of cases, they are partial, yet the principles which they illustrate are fundamental. Further studies will be necessary to show the full validity of these principles in their wider application. Perhaps the greatest value that this study has to offer is its revelation of the many factors involved, and its suggestiveness to others for making similar undertakings.

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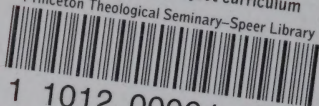
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